



UP Engineering
Research & Development
Foundation, Inc.

A large, stylized number '50' in a metallic gold color. The '0' is a thick ring with a white silhouette of a person with arms outstretched inside it. The '5' is a solid block with a white silhouette of a person with arms outstretched inside it. The background of the '50' has a subtle pattern of small white dots.

**50 YEARS
OF SHARING**
2022 ANNUAL REPORT

VISION, MISSION AND STRATEGIC OBJECTIVES

2022 - 2027

VISION

UPERDFI will be an enabler of engineering leadership and solutions for society with the UP College of Engineering as premier resource.

MISSION

Act as a staunch partner in ensuring the continuous availability of engineering resources to address society's needs for inclusive development

STRATEGIC OBJECTIVES

- 1 Nurture UPCOE in delivering top-notch engineering resources to society
- 2 Orchestrate projects with societal impact
- 3 Fully tap the network of members, alumni and partners in support of our initiatives





UP Engineering
Research & Development
Foundation, Inc.

The logo features a large, stylized number '50' in a dark brown color. The '0' is a solid circle with a silhouette of a person with arms outstretched inside it. The '5' is a solid shape with a dark brown arrow pointing right from its top right corner. To the right of the '50' is the text 'YEARS OF SHARING' in a bold, gold-colored, sans-serif font. Below this text is the text '2022 ANNUAL REPORT' in a smaller, dark brown, sans-serif font.

50 YEARS
OF SHARING
2022 ANNUAL REPORT

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REPORT TO OUR STAKEHOLDERS

The UP Engineering Research and Development Foundation, Inc. (UPERDFI) supports the UP College of Engineering and orchestrates projects that have actual societal impact in the Philippines. Being a science foundation, we have aligned our over-arching goal to the DOST’s mantra - Science for the People, not science for the archives. It is our pleasure to report to our stakeholders the progress we have made towards achieving our purpose.

We celebrated our 50th anniversary on August 3, 2022, marking a half-century of action to promote engineering education, research and development in the Philippines. The Golden Anniversary celebration was a momentous occasion for our Foundation as we acknowledged our donors (individuals and corporates) and cited our accomplishments. The Golden Anniversary Celebration initiatives can be found on page 13.

In addition to recognizing the contributions of the UPERDFI over the past 50 years, the celebration also looked to the future of engineering in the Philippines and the key role of the University of the Philippines and the Foundation in driving this forward. This annual report concludes with the vision of the Foundation for the years to come (page 24).

In conjunction with special projects, UPERDFI continued its legacy initiatives in support of the UP College of Engineering – faculty development, student support, infrastructure, and R&D program.

Faculty Development

UPERDFI encourages faculty members to pursue research and development work by providing professorial chair awards, teaching and research awards and publication incentives.

No. of Recipients	2022
Professorial Chair Awards	130
Teaching and Research Awards	32
Faculty and Staff Awards	8
Total	170

The research work of professorial chair holders for the academic year of 2022-2023 were showcased in the Professorial Chair Colloquium: Engineering Research and Development Towards

Sustainable Development Goals conducted in January 2023 (page 16).

Student Support

By engaging donors, UPERDFI helps deserving engineering students in their pursuit of academic excellence amid financial challenges. The scholars are selected based on academic performance and financial need.

Through this program, we hope to help shape the future of engineering in the Philippines by providing opportunities to the next generation of engineering leaders.

No. of Recipients	2022
Scholarships and Study Grants	235
Thesis Support Grants	82
Student Awards	10
Undergraduate Project Competition	10
Total	337

Infrastructure

UPERDFI’s infrastructure program aims to equip the faculty and students with quality tools and a conducive environment for research and instruction. In 2022, we completed the funding requirement and procurement of additional cores of computing power for the UPCOE Computing Facility (page 17). The initial core bank was procured by the UPCOE using DOST funds and UP Diliman inputs. The facility was inaugurated in February 2023.

We also supported the initiatives of alumni organizations and academic units in the College to modernize facilities. In 2022, we administered the funds for the following projects:

- Infinity Walk Legacy Project by Tau Alpha Foundation
- Purchase of Computers for the Department of Chemical Engineering as part of the DChE@75 Catalyzing Honor and Excellence Fund Campaign
- Purchase of Computers for Department of Industrial Engineering and Operations Research as part of the UIPE Golden Pillars Project

Research and Development

Our Foundation continues to support research and development in engineering through funding and partnerships with the academe and industry. The Innovation Committee reports on the R&D projects on page 18.

Organization

UPERDFI has six board committees - Audit, Finance, Governance, Innovation, Membership, and Resource Generation. Each committee is headed by a Trustee and formed by UPERDFI members. The committees' activities for the past year can be read on page 18.

As we look back on our accomplishments for the year, we are grateful for the continued support of our stakeholders. The progress we have made would not have been possible without the generous contributions of our donors, the efforts of faculty and students, the dedication of our Foundation's leaders and members, and the hard work of our staff.

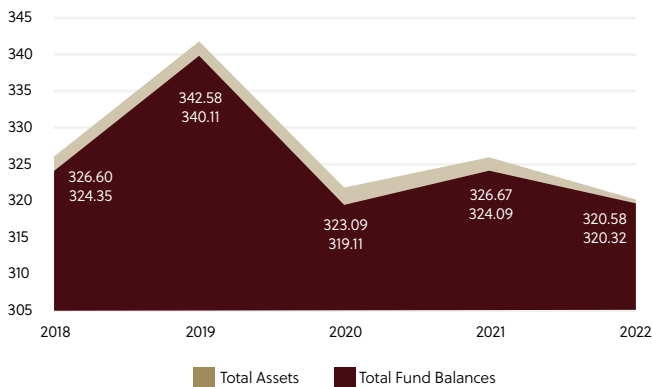
We remain committed to advancing the field of engineering by supporting projects that make use of the intellectual capital resident in the UP College of Engineering! We look forward to another productive year ahead.

Financial Highlights

No Growth in Fund Balances

While we have been able to address the needs of the UPCOE, practically all our donations received were meant for items to be disbursed the same year. We were not able to raise endowments, and earnings from endowments further decreased as some donors of endowed professorial chairs also agreed that we draw down the chair awards from the corpus of their endowment funds. Thus, we have not been able to grow our asset base for the past 5 years. Our total fund balances in 2018 was at 324.35 Million and in 2022, it is at 320.32 Million.

Balance Sheet (2018-2022)



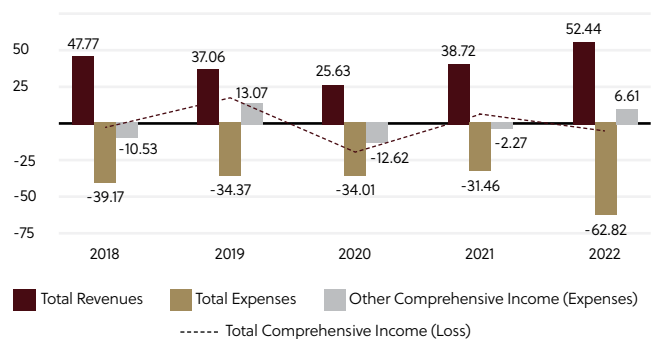
Spending Based on Available Funds

We managed spending based on the income we generated.

Support to UPCOE in 2022

Category	Amount
Faculty Development	17,685,000
Student Development	8,512,083
Sponsored R & D Projects	4,870,591
Infrastructure	21,748,159
Total	52,815,833

Statement of Revenues and Expenses (2018-2022)



Statement of Assets, Liabilities and Fund Balances (in ₱ millions)	2018	2019	2020	2021	2022
Total Assets	326.60	342.58	323.09	326.67	320.58
Total Liabilities	2.25	2.47	3.98	2.58	0.26
Total Fund Balances	324.35	340.11	319.11	324.09	320.32

Statement of Revenues and Expenses (in ₱ millions)	2018	2019	2020	2021	2022
Revenue: Donations	31.31	26.96	24.37	30.48	43.53
Expenses	(38.51)	(33.69)	(33.28)	(30.96)	(62.44)
Other Income (Expense)	16.46	10.10	1.26	8.24	8.91
Excess (Deficiency) of Revenue over Expenses before Final Tax	9.26	3.37	(7.65)	7.76	(10.00)
Provision for Income Tax	(0.66)	(0.68)	(0.73)	(0.50)	(0.38)
Excess (Deficiency) of Revenue over Expenses	8.60	2.69	(8.38)	7.26	(10.38)
Other Comprehensive Income (Expenses)	(10.53)	13.07	(12.62)	(2.27)	6.61
TOTAL COMPREHENSIVE INCOME (LOSS)	(1.93)	15.76	(21.00)	4.99	(3.77)

Acknowledging the Friends of the University of the Philippines Foundation in America and the UP Foundation, Inc.

We are extremely grateful to the FUPFA for its full support to UPERDFI, by way of handling donations from US-based donors! Beyond that, FUPFA made a significant contribution to our High Performance Computer Facility Project as the largest donor.

The UP Foundation is the second largest donor to the HPC Project. Together, FUPFA and UPFI accounted for 70% of the funds raised.

Strengthening Our Backroom

We continued our migration to the cloud-version of QuickBooks Accounting Software. We also implemented a Document Management System (DMS) and prepared for digital banking operations.

This 2023, we are implementing a more responsive investment approach, hoping to build on an improving interest regime. At the same time, backroom operations will be beefed up.



ALEX SY SUN ENG
Chairman



RAFAEL NESTOR V. MANTARING
President



ALFONSO A. ALIGA, JR.
Executive Director

DEAN'S REPORT

The UP College of Engineering Annual report covers the period from January 2022 to December 2022. This report consists of five (5) sections: (I) Overview of the College, (II) Teaching and Education, (III) Research and Extension Service, (IV) Public Service, (V) Infrastructure, Rehabilitation, and Operational Excellence.

I. Overview of the College

The UP College of Engineering (UP Engg) consists of six (6) departments, two (2) institutes, the National Graduate School of Engineering (NGSE) with the department/institute graduate degree programs and three (3) interdisciplinary graduate programs, and the National Engineering Center (NEC) with its five (5) constituent centers: the Building Research Service (BRS), National Center for Transport Studies (NCTS), National Hydraulic Research Center (NHRC), Philippine Learning Center for Environment and Social Sustainability (PIHILCESS), and the Training Center for Applied Geodesy and Photogrammetry (TCAGP). The College offers twelve (12) undergraduate and twenty-two (22) graduate programs.

The UP College of Engineering has a roster of 250 regular faculty members, 4 Professor Emeriti, and 80 part-time faculty members, 140 administrative staff, research, extension, and professional staff (REPS), and non-UP staff, and 342 project staff.

20th Dean of the College of Engineering

The College welcomed its new Dean, the former Director of the Institute of Civil Engineering, Prof. Maria Antonia N. Tanchuling. She succeeds Prof. Ferdinand G. Manegdeg and will serve from September 1, 2022 to August 31, 2025. The Turnover Ceremony was held August 31, 2022 at the Cristy Hernandez Activity Center (CHAC), as shown in Figure 1.



Figure 1. Turnover ceremony

The Executive Team of Prof. Tanchuling is composed of the following:

Associate Dean for Research	Prof. Roel M. Ocampo
Associate Dean for Administration	Prof. Menandro S. Berana
Associate Dean for Academic Affairs	Prof. Leslie Joy L. Diaz
Associate Dean for Student Affairs	Assoc. Prof. Kate Tungpalan
Associate Dean for Alumni and Institutional Linkages	Prof. Eric Augustus J. Tingatinga
Associate Dean for Public Engagement	Prof. Rowaldo Del Mundo
College Secretary	Prof. Jhoanna Rhodette I. Pedrasa
Director of the National Graduate School of Engineering	Prof. Louis Angelo M. Danao

As Dean, she takes the concurrent role as Executive Director of the UP National Engineering Center and the Trustee position in the UPERDFI Board.

II. Teaching and Education

For the First Semester of Academic Year (AY) 2022-2023, the student population consists of 4,488 undergraduate students and 1,238 graduate students, and for the Second Semester of the AY 2022-2023, there are 4,291 undergraduate students and 977 graduate students. In the 2022 undergraduate recognition rites with the theme, "Pagtanaw sa Nakaraan, Pagsulong sa Kinabukasan," the College graduated 553 students from 12 Bachelor of Science degree programs, with 167 receiving Cum Laude, 147 receiving Magna cum Laude, and 49 receiving Summa cum Laude. In addition there were 2 Oblation Scholars, 17 Academic Excellence Awardees, and a dozen other College Student Awardees. For the graduate degree, the College has a total of 105 graduates, 11 from the MEgg programs, 85 from the master's degree programs and 9 from the doctoral degree programs.

The College continued to support the online learning needs of its students through the Laptop Computer Donation Drive, with the help of the UP Engineering Research and Development Foundation, Inc. (UPERDFI) and UP Alumni Engineers (UPAE).

Faculty Development

In recent years, there has been an increase in the number of Ph.D holders in the College, as demonstrated in Table 1. The College also welcomes two new Professor Emeriti: Dr. Benito M. Pacheco of the UP Institute of Civil Engineering (left), and Dr. Alberto V. Amorsolo, Jr. of the UP Department of Mining, Metallurgical, and Materials Engineering (right) (shown in Figure 2).

Acad. Unit	BS	MS	PHD
CHE	4	6	20
ICE	13	17	20
CS	3	14	14
EEEI	2	17	22
GE	9	10	6
IEOR	6	7	6
ME	5	10	9
MMME	5	15	10
Total	47	96	107

Table 1. UP Engg faculty profile 2022 based on degree.

The College, with the full support of the UPERDFI, has continued to seek additional Professorial Chair Awards (PCA) and Teaching and Research Awards (TRA) funding. Faculty members have received various awards within and beyond the College to honor their contributions to the profession.

Every year, the Faculty Awards recognize the achievements of outstanding faculty members. For 2022, the awardees, as shown in Figure 3 (from left to right), are as follows: Prof. Ariel C. Blanco (DGE) for Outstanding Engineering Researcher Award,



Figure 2. New Professor Emeriti of the College



Figure 3. Awardees for the 2022 Faculty Awards

Dr. Magdaleno R. Vasquez, Jr. (DMMME) for Outstanding Engineering Professor Award, Engr. Karl Adrian P. Vergara (DGE) for Limcaoco Young Instructor Award for Teaching Excellence, and Engr. Luis Carlos S. Mabaquiao (DGE) for Outstanding Engineering Instructor Award.

To prepare the incoming College administration, a training on strategic planning was held at the Melchor Hall Maynilad Room in October 2022, facilitated by Prof. Lily Domingo of the UP NCPAG (shown in Figure 4). Present at the event were the Dean, Associate Deans, officials of the College and representatives of the different units, institutes and departments of the College.

Through the 2-day workshop, the vision of the College to be the National Institutes of Engineering was crafted, the details of which are still being formulated and will be subjected to consultation with all the stakeholders of the College.



Figure 4. Strategic planning session

College-wide PCA Colloquium

For 2022, there were 131 Professorial Chair Awardees and 33 Teaching and Research Awardees. The College-wide colloquium with the theme, “Engineering Research and Development Towards Sustainable Development Goals” was held on January 25-27, 2023 with at least 216 attendees.

Academic Programs

The UP COE started offering a graduate course on AI in the first semester of the Academic Year 2022 - 23, with ten (10) ERDT full graduate scholarship slots for the 1st Semester AY 2022-2023 approved for UPD.



The College of Engineering envisions establishing a Naval Architecture and Engineering Program to provide technical training for chief captains and contribute in strengthening the maritime industry of the country. In addition, interdisciplinary programs are necessary in order to meet 21st century challenges relating to practical and timely engineering education. A committee was constituted by the college, headed by Prof. Edwin N. Quiros (Vehicle Engineering) with Prof. Eric C. Cruz (Coastal Engineering), Asst. Prof. Paul L. Rodgers (Naval Architecture), Asst. Prof. Czar Jakiri S. Sarmiento (Applied Geodesy and Photogrammetry), Prof. Ricardo G. Sigua (Transportation Engineering) as members, to develop the framework towards the possible institution of a Graduate Program in Naval Architecture and Marine Engineering. As shown in Figure 5, a consultation was done with the University of Strathclyde, World Maritime University, MARINA, World Bank, and the International Maritime Organization regarding the possible routes in instituting the graduate program.

The Department of Geodetic Engineering is planning to institute a PhD in Geomatics Engineering.

The Energy Engineering program also spearheaded the possibility of instituting a Nuclear Engineering program. Dr. Rinlee Butch Cervera, in his capacity as EgyE program coordinator, also chaired the ad hoc committee to draft the nuclear engineering framework, output, and plans.

The Department of Industrial Engineering and Operations Research also secured approval of its proposed PhD program in Industrial Engineering from the College Graduate Faculty Committee on August 26. The target is to offer the doctorate program by 1st semester of AY 2023-2024.



Figure 5. Meeting with University of Strathclyde, World Maritime University, MARINA, World Bank, International Maritime Organization regarding Naval Architecture and Marine Engineering Program

The Electrical and Electronics Engineering Institute (EEEI) initiated a review of its graduate programs. Revisions to its undergraduate curriculum were also made. Meanwhile, the Institute of Civil Engineering (ICE) offered four graduate elective courses covering topics on environmentally sustainable transport, ground improvement, non-destructive testing, and port engineering for the Second Semester 2021-2022.

The College embraces internship programs as part of the holistic development of the students, enabling them to be industry-ready and adapted in actual settings. The College continuously seeks industry partners for its internship program with the help of CAPES, and other organizations.

The College also ensures the accessibility of learning resources through the continuous optimization of the Engineering Library. In 2022, its eResources was approximately 22M PhP covering access to eTextbooks and digital platforms. Increased digital transformation of the Engineering Library is a far-reaching achievement, a proactive response to online learning and beyond, that addresses the learning needs of the students.

In 2022, the College had started to gear up for the return to face-to-face activities. Shown in Figure 6 was the set-up for the limited face-to-face classes.

Aside from College-wide efforts, the departments and institutes have their own initiatives for the gradual return of classroom learning and procurement of equipment in compliance with health and safety protocols.



Figure 6. Set-up for limited face-to-face classes at Melchor Hall

Student Performance in 2022 Licensure Examinations

COE students topped the licensure examinations this year. In the August & September 2022 Mining Engineer Licensure Examination, the passing rate for DMMME graduates was 100% and wherein 9 out of the 10 toppers were from the department. 100% of UP EEEI takers for the September 2022 Electrical Engineer Licensure Examination passed and with one becoming the fifth top scorer. 4 out of 10 toppers from the October 2022 Geodetic Engineer Licensure Examination hailed from DGE which also earned a 95.74% passing rate; and 5 out of 10 toppers in the November 2022 Civil Engineer Licensure Examination came from ICE which earned a 95.45% passing rate. In the May 2022 PRC Licensure Exam, the Department of Chemical Engineering also gathered the top honors for its 100% passing rate.

Finalists in the UPC 2022

This year's Undergraduate Project Competition (UPC) was a

fierce standoff, featuring 12 finalists among 49 entries. The top six (6) Design Projects are “Creducate: Blockchain-based Academic Record Management and Verification System Built in the Solana Network” by Katrine Grace R. Maranan, Diana Vanessa S. Castillo, and Chelsee Nicole B. Co; “A Conceptual Design of a Continuous Passive Motion Machine for ACL Rehabilitation Therapy” by Vincent Stanley Q. So; “Mechanical Seedling Transplanter” by Ana Therese A. Levosada; “Silver nanowire-PVB composite for Reflective Heat Coating” by Mariz Gebrielle M. Domingo; “Smart Conversion Kit for Traditional Appliances through Microcontrollers and a Home Automation Platform” by Ron Neil Matthew S. Alonzo, Allen Joshua S. Dalangin, John Limuel P. Peradilla; “Techno-economics of ‘Teal’ Hydrogen Production via Combined Steam Methane Reforming and Biomass Gasification” by John D. Cagape, Kim Andrei R. Danganan, and Chrissen Juvileen D. Galang.

The top 6 Research Projects are “Analysis of Flooding in Calasiao Under Typhoon Ketsana (Ondoy) Rainfall Scenario Using Hydrologic and Hydraulic Modeling” by Maricris C. Barolo, “Analyzing the Effect of Typhoon Forward Speed on Storm Surges in Manila Bay Using Numerical Modelling” by Renea Isabella M. Espiritu, “Mask-crete: Fabrication of Concrete with Recycled Medical Masks as Fibre Reinforcement” by Wynona Raechel M. Magnaye, “Prediction of Net Wind Pressure Coefficients in Isolated Low-Rise Gable Roof Buildings using Artificial Neural Networks” by Bill John B. De Vera, “Shape Optimization of Non-prismatic Beams Using Isogeometric Analysis” by Jan Kenneth C. Macagba, “Study of the Effect of the Southwest Monsoon and Typhoon Wind Speed on Storm Surges in Manila Bay” by Andrew Aren B. Ong. The UPC, spearheaded by the Office of the Associate Dean for Research, is an annual event aimed at showcasing the best senior-level research and design projects of our undergraduate students. More details on their projects can be accessed at: <https://www.facebook.com/photo/?fbid=5654043464613907&set=pcb.5654049977946589>

The List of Winners is shown in Annex 7. The UPC Awards is funded by Dr. Francis Chua, UPERDFI Member.

2022 Gawad Tsanselor sa Natatanging Mag-aaral

The COE takes pride in the achievement of its students. As shown in Figure 7, the 2022 Gawad Tsanselor sa Natatanging Mag-aaral were conferred on COE students Rowill Christian R. Rempillo from the UPD Mechanical Engineering Department (right) and Jan Goran T. Tomacruz from the UP Diliman Department of Chemical Engineering (left). This prestigious award is given to those students who excel not only academically, but also demonstrate good leadership and personify honor and excellence in serving the people.



Figure 7. 2022 Gawad Tsanselor sa Natatanging Mag-aaral

Lantern Parade

After a two-year hiatus in the COVID-19 pandemic, the UPD Lantern Parade had finally lit the campus once more with competitive entries from different units each with their own designs expressing the spirit of the theme. The College proudly joined the parade with its unique and low-cost entry crafted through the collective efforts of the Engineering Student Council (Figure 8).



Figure 8. COE entry for the UPD Lantern Parade 2022

III. Research and Extension Service

Together with the National Engineering Center (NEC), the College conducted several research projects in different fields of expertise. The number of projects increased from 2021 to 2022 and expanded in extension services and consultancy for both private and government institutions. The Office of the Associate Dean for Research (OADR) manages the recognition of research achievement of students, staff and faculty through awards. For 2022, the search committee under the OADR awarded Rea Bunuan of NEC the Outstanding REPS Award and Dr. Ariel Blanco of the GE Department the Outstanding Researcher Award.

With projects funded by government institutions, specifically, the Department of Science and Technology (DOST), Commission on Higher Education, and by UP Diliman, the World bank, and by private funding institutions, research funding for 85 projects in 2022 amounted to almost PhP 1.5B as shown in Table 2. Figure 9 shows the different institutions that funded the projects.

	2021	2022
Number of Projects	59	85
Total Research Funding	536,954,514.02	1,499,138,856.86
No. of Project Employees	606	373

Table 2. Number of projects, funding, and employees from 2021 to 2022

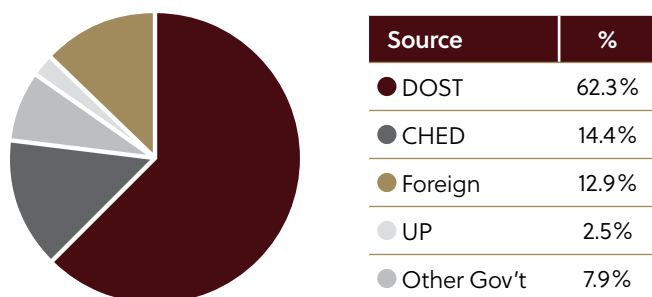


Figure 9. Sources of project funds in 2022

The Engineering Research and Development for Technology (ERDT) and its eight consortium member universities continue to produce MS and PhD graduates who enjoy the benefits and privileges in scholarship programs of ERDT's Human Resource Development component. ERDT, through its research grant savings, was able to acquire the first 512 cores of High-Performance Computing servers worth 6.70M pesos and to contribute 13.56M to the HPC facility.

Department and Institute Collaborations with Government and Industry Partners

In 2021, DGE through ALIGN Committee and UP Geomatics Alumni Association (UP GAA), agreed on collaborative efforts comprising of designing activities on geomatics applications and GE-related work, developing materials for the set of activities to be offered to GE alumni and students (and other allied profession/specialization), facilitating the offering of activities, either online or on-site, and identifying and inviting resource persons and participants for the topics covered in the activities. In 2022, partner companies of DGE served as Host Training Establishment (HTE) to 3rd/4th year BS GE students during the Midyear Term implementation of virtual/online internship.

DGE also forged agreements with the following institutions (private, government and NGOs) for the internship program: DOST PHIVOLCS, Argotek Inc., NDR Surveying Services, Certeza Infosys Corporation, Ayala Land Inc., Geomatica Engineering Services, and PAGASA.

The Materials R&D and Consulting Facility (MRCF), established to facilitate the extension services of the Department of Mining, Metallurgical and Materials Engineering (DMMME) of the University of the Philippines (UP) as well as to provide technical support to its research and academic functions, facilitates the testing services provided by the Materials Characterization Laboratory. From 2021 to 2022, it has accomplished research collaborations with various partners.

One of the papers produced in the collaborative project between the Energy Engineering Graduate Program (EgyE) with funding from the Senate Committee on Energy through the UP Office of the Vice-President of Academic Affairs from 2019 to 2021 titled "Waste profile and waste-to-energy conversion potential of medical, hazardous industrial, and electronic residual wastes in Metro Manila, Philippines", received the National Academy of Science and Technology (NAST) Outstanding Scientific Paper Award 2022. The agreement on key researcher exchange was also accomplished through the International Collaborative Graduate Program (ICGP) agreement with NIMS in 2022. The EgyE program was also instrumental in drafting the IRR, approved in 2022, for the Pursuant to Section 10 of Republic Act No. 11393, otherwise known as the Advanced Energy and Green Building Technologies Curriculum Act, the Commission on Higher Education (CHED) in consultation with the Department of Energy (DOE).

The Environmental Engineering Program organized the virtual 15th RCEnE on January 17-18, 2022 which gathered 225 participants. In the event, 47 papers were presented in technical sessions, along with 3 keynote lectures and 6 plenary lectures by Professors from universities of Japan, USA, Italy and Spain. This also enabled brainstorming discussions among EnE Faculty Affiliates from various COE Departments on Concepts for Solid Waste Management Program and Air Pollution Management Project Proposal. The event was supported by AUN/SEED-Net and UP System OIL.

The UP College of Engineering also co-organized the 5th Renewable Energy Congress (RE Congress) and Exhibit with the Center for Empowerment, iNnovation and Training on Renewable Energy (CentRE) and Friedrich-Ebert-Stiftung (FES)-Philippines held in-person at the UP Institute of Civil Engineering, and online via zoom in 12 October 2022, as shown in Figure 10.



Figure 10. 5th Renewable Energy Congress

IV. Public Service

Public policy lectures that aim to raise awareness on the value of engineering and science, highlight their critical roles in improving the everyday lives of people, and provide a venue among the industry, academia, and the government on critical national issues and policies were held once more last March 25, 2022 with the topic, “Value Adding in the Semiconductor and Electronics Industry,” and May 27, 2022 to tackle “Shaping the Mining Industry Landscape: a Cursory Regulatory Impact Assessment” (Figure 11). The public policy lectures are primarily aimed to engage policymakers and decision-makers.

“Galing at Husay ng Engg,” the College’s unique podcast series featuring distinguished faculty, staff, REPS, and students from the College, is currently live-streamed via the College’s Facebook page as DZUP 1602 is yet to resume its full operations and regular programming. Figure 12 shows an image of the podcast as it appears on UP Engg’s website and social media pages.

In 2022, the podcast featured some of the women engineers and faculty of the UP College of Engineering: Asst. Prof. Lea Bronuela-Ambrocio (Institute of Civil Engineering, UPCOE GAD committee), Engr. Erica Erin Elazegui (Department of Geodetic Engineering, UP COE GAD committee), Prof. Maria Antonia Tanchuling (in her capacity as previous Director of the Institute of Civil Engineering) and Engr. Ellarizza Fredeluces (Department of Geodetic Engineering) in celebration of the International Women’s Month, and Gawad Tsanselor sa Natatanging Mag-aaral Awardees 2022: Rowill Christian R. Rempillo and Jan Goran T. Tomacruz.

In a statement released March 2022, UP Engg also expressed indignation on the death of its alumnus, Chad Errol R. Booc, and urged the state to conduct an independent investigation on the unsettling and suspicious circumstances of his death. The College was deeply concerned over such an incident, not only because Booc is an alumnus, but also due to the overarching repercussions of the controversial incident on



Figure 11. Public policy lectures



Figure 12. UP Engg weekly podcast: “Galing at Husay ng Engg!”

political rights. The full statement can be accessed through this link: <https://www.coe.upd.edu.ph/2022/03/03/up-diliman-college-of-engineering-administration-statement-on-the-death-of-chad-booc/>

VI. Infrastructure, Rehabilitation, and Operational Excellence

In line with the continuous efforts in improving the College infrastructure and making them aligned to the the needs of interdisciplinary programs, the master development plan of the IE/ME/GE building to house Biomechanical/Biomedical Engineering, Supply Chain Engineering, Naval Architecture and Marine Engineering, Nuclear Engineering, Technopreneurship Engineering, Artificial Intelligence, and Data Engineering is being proposed.

“We are thankful for UPERDFI for its unwavering support to various College activities in 2022 and are hopeful for our continued collaborations in the years to come.”

The College also conducted a landscape design competition and a sculpture design competition for the transformation of Melchor Building and the Engineering Complex into an alluring and welcoming space not only for the Engineering community but also for the public. The winning designs of both competitions were targeted to become the adopted designs. Figure 13 shows the First Place winner of the landscape design competition (left) and the two Second Place winners of the sculpture design competition (right).

The mental health and wellness of the UP Engineering community is vital. As part of the proactive response in taking care of the mental health and wellness of the students, faculty, and staff, Health and Wellness Rooms were created in Engineering buildings for the purpose of creating a venue to relax, study, and socialize. Figure 14 shows pictures of Health and Wellness Rooms in the DCS (left) and the DMME (right).

UP Engg once again provided a cash incentive award to qualified administrative staff and REPS acknowledging their valuable contribution in maintaining the efficiency of day-to-day operations and research work for 2022. The College also values the outstanding service of its staff and awards qualified personnel through the Administrative Chair Awards and the Outstanding REPS Award. Figure 15 shows the awardees for 2022: (from left to right) Ms. Cheryl Lynn F. Bustillos (DMMME), Mr. Leslie B. Crisostomo (Building Maintenance Office), and Mr. Ricardo L. Moralejo (Property Office) for the Administrative Chair Awards, and Ms. Maria Rea F. Bunuan (NEC) for the Outstanding REPS Award.

The administrative staff and College REPs had also concluded their five-year strategic planning at The Yellow Beach Villa in Binmaley, Pangasinan. The administrative staff conducted their planning activity on 18-19 June 2022 and COE REPS conducted theirs on 25-26 June 2022.

Closing Remarks from the Dean

2022 was a year of transitions for the College, from the turnover of its Deanship to the gradual return of various face-to-face activities and so much more. We are, however, accustomed to meeting changes no matter how big or small. In the last two years, we brought classroom learning into the digital environment in a matter of months and learned to adapt new



Figure 13. Winners of the landscape design competition and a sculpture design competition



Figure 14. Health and Wellness Rooms



Figure 15. Awardees of the Administrative Chair and Outstanding REPS 2022

methods in teaching. We streamlined our research efforts to help the government and industry address pressing health, environmental, and social issues.

Our administration fully embraces the challenges that the post-pandemic 2023 poses. We accept the hurdles that may come along our endeavor in helping to shape the nation toward a sustainable future. Most importantly, we are challenging ourselves to venture down the road in becoming the National Institutes of Engineering. While we continue moving forward with best practices affirmed by previous administrations and opportunities accomplished by them, we will also create new and timely endeavors to enrich the capacity of our beloved College especially in addressing real-world challenges, in being more relevant in the lives of the marginalized, and in consolidating the institutional strength of our organization through collective leadership.

We are thankful for UPERDFI for its unwavering support to various College activities in 2022 and are hopeful for our continued collaborations in the years to come.

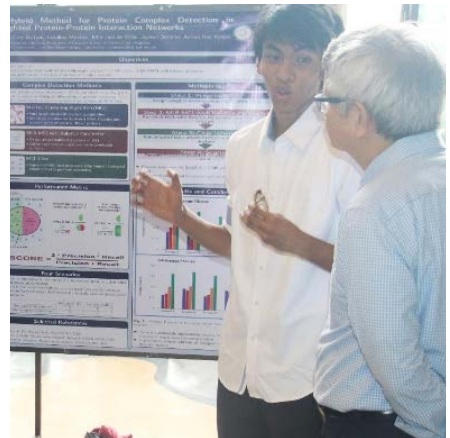
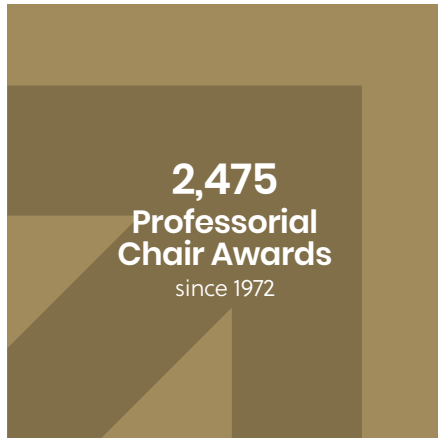
Mabuhay ang siyentipiko at inhinyero ng bayan!

CROSSING OVER TO THE NEXT GOLDEN AGE

The UP Engineering Research and Development Foundation, Inc. was established on August 3, 1972 to support the UP College of Engineering in its mission to produce top-notch engineers and promote research and development toward nation-building. UPERDFI took the Golden Anniversary as an opportunity to reflect upon its first 50 years of establishment.

50 Years of Sharing

With the continuous support of UP engineering alumni and friends, UPERDFI has grown from the initial asset base from an endowment fund of PhP 300,000 in 1972 to PhP 320,000,000 in 2022. This has enabled UPERDFI to sustain its support for the UP College of Engineering.



UPERDFI has contributed to the building and or modernization of infrastructure and facilities for the College such as the UP Engineering Centennial Dormitory, ICE Building, research and instructional laboratories, and lecture rooms in the various Engineering Buildings.

UPERDFI also administered hundreds of research studies and projects carried out by faculty, and through the component arms of the National Engineering Center, and funded projects from its Technology Development and Strategic Studies Fund. It also mobilized the support in funding the COVID-19 applied research projects in 2020.

Crossing Over to the Next 50 Years

As UPERDFI moves forward, its leaders and members convened to define its Strategic Objectives to guide future initiatives. The Foundation aims to:

1. Continue nurturing UPCOE in delivering topnotch engineering resources to society through faculty, student, and infrastructure support;
2. Orchestrate projects with societal impact through commissioned research and R&D grants; and
3. Fully tap the network of members, alumni, and partners to strengthen its ability to undertake projects and sustain programs.

Golden Anniversary Celebration

The UPERDFI Golden Anniversary Committee headed by 2021-22 President and Trustee Val Reyes and Adviser Chato Calderon spearheaded the celebration of this auspicious occasion through the publication of a coffee table book, the conduct of a thanksgiving dinner and the production of a commemorative video.

On August 3, 2022, UPERDFI held its Golden Anniversary Thanksgiving Dinner at the UP Bahay ng Alumni. Esteemed donors, members and partners and University Officials led by President Danilo L. Concepcion graced this auspicious occasion.



(L-R) Val Reyes, Chicho Mantaring, Alex Sy, Pres. Danilo Concepcion and Chato Calderon

Member Bing del Rosario hosted the event, Val Reyes led the invocation and Chato Calderon welcomed the attendees and thanked the members of the Golden Jubilee Committee who worked on the coffee table book, AVP, event and fundraising. Chairman Alex Sy gave the opening remarks and shared the commitment of UPERDFI to support the College for the benefit of society.

The commemorative video was premiered during the event. It told the story of UPERDFI's inception, impact areas and challenges during its first 50 years.

The memorabilia book was also launched and given to the special corporate and individual donors who have immensely contributed to support UPERDFI and UPCOE since 1972.

UPERDFI also presented a Plaque of Appreciation to Executive Director Tito Aliga for leading the Foundation's initiatives and day to day operations since 2017.

The EnggMusika ensemble composed of members Chato Calderon, Aura Matias, Babylin de Leon, Boy de la Peña, Glen Tabios and Ji Reyes rendered song numbers.



EnggMusika Reunion

The closing remarks of Dean Ferdinand Manegdeg were delivered by Associate Dean Carl Michael Odulio. Dean Ferdie thanked UPERDFI, alumni and industry for continuously collaborating with the academe. UPERDFI President Chicho Mantaring thanked the donors who contributed to the Golden Jubilee Fundraising and reiterated UPERDFI's commitment to mobilize resources in support of engineering projects that benefit society.

UPERDFI is grateful to all the special guests who joined this momentous occasion. This event was organized by UPERDFI led by Bing and Elise del Rosario, the UP College of Engineering and the National Engineering Center, led by Dean and Executive Director Ferdie Manegdeg.



Pepe Santiago, Boy de la Peña, Mila Sy, Roger Murga, Mar Casillan and Gus Lagman



Karenina Buenafe (Huawei), Riza Mantaring, Aura Matias, UP President Danilo Concepcion, Mitzi and Ji Reyes, Chato Calderon and Chahol Liang (Huawei)



Mon and Beth Allado, Chato Calderon, Danilo Concepcion, Pepe Santiago and Alex Sy



50 YEARS OF SHARING



(seated) Mon Segismundo, Aura Matias, Debbie and Jeng Pascual
(standing) Rorie and Ricky Peña, Riza and Chicho Mantaring



Michael Gonzalez, Art Disini and Cris Acosta (Filminera)



THANKSGIVING DINNER



Jill Ramos and Stephanie Frogoso (Holcim) and Leonard Agcamaran (OceanaGold)

ENGINEERING RESEARCH AND DEVELOPMENT TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS

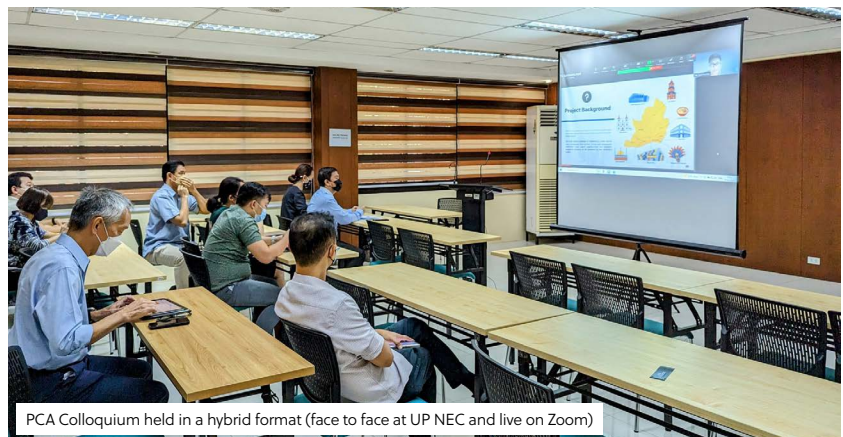
UP COLLEGE OF ENGINEERING PROFESSORIAL CHAIR COLLOQUIUM

UPERDFI solicits and administers the funding for the professorial chairs, which are annual awards for faculty members who pass a rigorous application process carried out by the College of Engineering. For the 2022 awards, the College of Engineering headed by Dean Maria Antonia N. Tanchuling decided to organize a college-wide colloquium to disseminate research outputs of our faculty to a wider audience, solicit inputs and feedback from the public, and provide a venue to discuss related research from the different units in search of future interdisciplinary applications or policy implications.

Academe, industry, and government leaders joined the three-day colloquium featuring 131 professorial chair awardees held from January 25 to 27 at the UP National Engineering Center. With the theme "Engineering Research and Development Towards the Sustainable Development Goals", the presentations were clustered into eight thematic areas:

- 🖥️ computers and information and communications technology
- 🚒 disaster preparedness, prevention, and mitigation
- ⚡ energy and power
- 🌿 environmental protection and preservation
- 🏥 health and well-being
- 🏠 sustainable (smart) cities and communities
- 💧 waste and water
- ♻️ responsible consumption and production

UP President Angelo Jimenez, UP Diliman Chancellor Fidel Nemenzoa and UPERDFI President Rafael Mantaring delivered messages of support to the faculty members and organizers of the PCA Colloquium. Several participants from government agencies and industry sectors expressed interest in follow-up discussions. Associate Dean Rowaldo del Mundo will arrange these focused presentations with the support of UPERDFI.



UPCOE Dean Tonette Tanchuling welcomes the attendees to the PCA Colloquium



UP President Angelo Jimenez delivers special message on significance of engineering R&D in development



UP Diliman Chancellor Fidel Nemenzoa shares message of support to the PCA recipients



UPERDFI President Chicho Mantaring expresses gratitude to donors of professorial chair awards, highlights relevance of R&D for the benefit of society

TURNOVER AND INAUGURATION OF THE UP COLLEGE OF ENGINEERING COMPUTING FACILITY

UP officials, donors, UPERDFI members, and esteemed guests joined the turnover and inauguration of the UP College of Engineering (UPCOE) Computing Facility on February 15, 2023, at the National Engineering Center, UP Diliman, Quezon City.

The program included special messages from UP President Angelo A. Jimenez, UP Diliman Chancellor Fidel R. Nemenzo, UPCOE Dean Maria Antonia N. Tanchuling, UPERDFI Chairman Alex Sy Sun Eng and UPERDFI President Rafael Nestor V. Mantaring, as well as the signing of the Deed of Donation for the computer cluster, ribbon cutting and unveiling of the marker. UPERDFI Member Rizalina Gervasio-Mantaring hosted the program.

UPERDFI acknowledged the leadership of former UP President Danilo Concepcion, who played a key role in establishing the Facility. He provided significant support for the project and secured much-needed financial assistance from the Friends of the University of the Philippines Foundation in America (FUPFA) and the UP Foundation. Inc.

UPERDFI launched the High Performance Computer (HPC) Project in 2020, in partnership with the UP College of Engineering led by former Dean Ferdinand G. Manegdeg and former Associate Dean for Research Gerald Jo Denoga who facilitated the implementation of the project and procurement of the computing cluster.

Problems that took weeks to model and simulate (using linked computers) can now be completed in a matter of minutes. The Facility is managed by a



Inauguration of the UP College of Engineering COMPUTING FACILITY

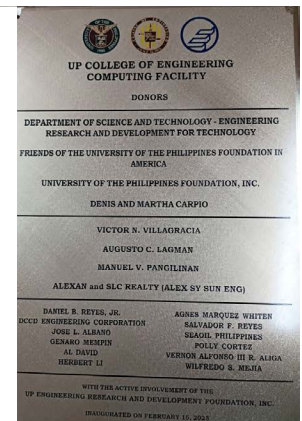
15 FEBRUARY 2023, WEDNESDAY 8:00 PM
Julino Hall National Engineering Center
Osmeña Avenue, UP Diliman



Turnover and Inauguration of the UPCOE Computing Facility.



Unveiling of UPCOE Computing Facility Marker.



UPCOE team led by the Associate Dean for Research Roel Ocampo. He is also the UP Coordinator for the DOST ERDT Program.

UPERDFI raised Php 20 Million for the procurement of 1,152 CPU cores, with appropriate high-speed RAM and storage capacity. The Computing Facility now comprises 1664 cores, 512 cores were earlier procured by the UPCOE from DOST ERDT funds, significantly increasing research productivity. UP Diliman provided the budget for the space and operating expenses.

UPERDFI continues to accept donations for the expansion of the Computing Facility. Donations will be used to procure additional cores, benefiting the UP College of Engineering's roster of 267 full-time and 97 part-time faculty members and over 5,000 undergraduate and graduate students. The facility will also be open to users from other UP colleges and from industry.

COMMITTEE REPORTS

Innovation Committee

The Innovation Committee continued its thrusts and advocacies from 2021. Most of the Committee's activities were centered around its Research-to-Market objective. We added initiatives however to align with the strategic objectives of UPERDFI which were adopted early in the year.

Research-to-Market

HeLe Project

We got involved in the HeLe project in 2021. The project is a collaboration between the UP College of Engineering and the National Institute of Health. Its objective is to develop a hearing screening device for newborns based on auditory brainstem response. Hearing screening of newborns is required by law. It has not been fully implemented however because of the prohibitive cost of the needed device. The project produced a prototype with funding from the Philippine-California Advanced Research Institute. The prototype needed improvements however for field testing and eventual commercialization. We connected the project with Embedded Silicon Technology Solutions Corporation (ESTSC) of member

Robert Minguez. ESTSC expressed interest in working with the project proponents to improve the design and make it ready for manufacturing. The project was rebooted with fresh funds from the Philippine Council for Health Research and Development of the DOST. Completion of the redesign is expected sometime 2023. ESTSC is directly involved in the redesign and has committed to invest in the commercialization of the project if proven viable.

Accenture Grant

In July 2021, UPERDFI entered into a Collaborative Agreement with Accenture Philippines, Inc. aimed at accelerating technology-based innovation in the Philippines. The agreement came with a grant to support UPSCALE startups and activities. UPERDFI's role was to administer the grant in partnership with UPSCALE.

A final report was submitted to Accenture in September 2022. There were two batches of grantees. The first batch consisted of five startups in the pre-seed stage. These startups had a viable product but needed support in bringing the product to market. Close to Php 5M was released to these startups. They are featured in UPERDFI's 2022 Annual Report. The remaining funds were allocated to five R&D teams to fund prototype development and help them come up with a minimum viable product. Accenture approved the proposed disbursements to these teams. The grantees are the following:

Startup	Objectives
<p>CONSTRUCTION & AI</p> <p>AIMHI (Artificial Intelligence Meet Human Intelligence) is a construction decision management platform</p>	R&D Advancement of AIMHI's MVP Validation in preparation to produce a large-scale prototype
<p>SPEECH & AI</p> <p>Voice is a privacy-focused, conversational AI technology voice processing system</p>	Develop a prototype while identifying and defining customers and end users
<p>BIOMEDICAL DEVICE</p> <p>Cardiovascular Rehabilitation Equipment (CaRE) is telerehabilitation system that provides continued physical activity at the comfort of their home</p>	Develop a pre-clinical prototype to conduct testing and trials for deployment in partner establishments
<p>BIOMEDICAL DEVICE</p> <p>Telemetry is a remote diagnosing medical device for reduce the risk of exposure to pathogens and to increase efficiency that is more cost-effective and more locally available than existing equipment.</p>	Develop RxBx-Telemetry Demonstration Sets for Market Introduction
<p>BIOMEDICAL DEVICE</p> <p>StepGear is a smart wearable device for gait re-training that provides real-time audio and visual feedback</p>	Upgraded industrial design; prototype and integration of knee and foot bands sensors

UPERDFI provided a mentor to AIMHI in the person of member Jon Kasilag, a seasoned construction design and management professional. Jon is helping guide the activities of AIMHI and expressed willingness to provide a testbed for their services.

Senior Partners and Mentors to UPSCALE

UPERDFI continues to provide senior partners and mentors to UPSCALE startups. Some have ended up being investors. UPERDFI members, especially the Committee members, are also occasionally called upon to participate as panelists in demo day sessions of UPSCALE cohorts.

Projects with Societal Impact

Over the next three years, the Foundation targets to raise at least Php 50M for sponsored research projects with the theme, "Engineering a Better Philippines." Two types of projects have been defined. First are donor-funded projects that benefit both the donor and society. Second are societal impact projects which the Foundation will initiate and manage. For donor-funded projects, we will use as a model the Coir+ Project which was successfully completed last year. While no new projects have since been initiated, several opportunities are under discussion, one of which is in the final stages of negotiation. For UPERDFI-initiated projects, several ideas are currently being considered.

Structured Engagement with Students

Students are an untapped resource that may be able to help the Foundation further its objectives, UPERDFI decided it would engage in activities that will bring it closer to the students. At the start of the 2022-2023 academic year, UPERDFI had the opportunity to address representatives from various student organizations. We made an offer to support their activities as long there was alignment with the societal impact objectives of the Foundation. We were never approached, however. We suspect it was because the remote learning environment still imposed at that time had curtailed student activities. The same call will soon be made with additional opportunities for engagement.

Chairman:

Rafael Nestor V. Mantaring

Members:

Frederick D. Chua

Joey B. Climaco

Mary Rose de la Cruz

Leo R. de Velez

Glenn C. Gratil

Robert O. Minguéz II

Patrick M. Ostrea

Enrico C. Paringit

Nicanor S. Villaseñor III

Olegario G. Villoria, Jr.

Resource Generation Committee

The focus of the Resource Generation Committee at the start of the year was to raise funds that would enable the Foundation to have a meaningful 50th year. It was tasked to fund the following activities:

1. The publication of a coffee table book that would chronicle the history and accomplishments of the Foundation.
2. The production of an audio-video presentation that would be used to publicize the Foundation and increase its visibility.
3. The production of an Artwork Token that would be gifted to all significant donors.
4. The holding of a simple and meaningful Anniversary Dinner where significant donors would be acknowledged.

We are grateful to the 47 members that responded to our call. We succeeded in funding the above without touching the General Fund of the Foundation. We thank these members for their generosity.

We also acknowledge the new donations for our legacy initiatives in 2022:

Faculty Development

1. Jerome H. Cainglet - Jeroma and Mary Iralyn Cainglet Professorial Chair in Chemical Engineering
2. Maria Aura Teodora Castillo Matias - Renato Bernales Matias DIEOR Golden Jubilee Professorial Chair in Human Factors and Ergonomics
3. Geotechnics Philippines, Inc. - Geotechnics Philippines Professorial Chair in Geotechnical Engineering
4. Jennifer Lynn Cua - Ernesto and Evelyn Cua Professorial Chair in Computer Science / Data Science / Artificial Intelligence; Ernesto and Evelyn Cua Teaching and Research Awards
5. Emmanuel U. Pornillos - Prof. Emmanuel U. Pornillos Professorial Chair in Mining Engineering
6. Cenon M. Carolino - Cenon and Mimilyn Carolino Teaching and Research Award
7. Manuel R. Bulaong, Jr. - Manuel and Leticia Bulaong Teaching and Research Awards

Student Support

1. Foxmont Capital Partners Scholarship and Masters Thesis Grants
2. Manuel and Carmen Magno Scholarship (Mario Magno, Dr. Rajeev Magno Advani and Dr. Vriti Magno Advani)
3. Megaworld Foundation, Inc. Scholarships
4. One Meralco Foundation Scholarships
5. UP Alumni in Minnesota Scholarship
6. UP Alumni Association of British Columbia Scholarships (Evelyn Mayuga, Melissa Remulla Briones, Vicente Ingco and Vicki Rubio Buechler)
7. Ricardo Rodriguez Thesis Support Grant

Research and Development

1. Dr. Luis J. Pascual Research Project
2. Denis T. Carpio - HPC
3. Ace Electronic Technologies, Inc. and SLC Realty and Management Corporation (Alex Sy Sun Eng) - HPC
4. Friends of the University of the Philippines Foundation in America (FUPFA) - HPC
5. University of the Philippines Foundation, Inc. (UPFI) - HPC
6. Murata Science Foundation Research Grants

The Committee took on the challenge from the previous Board to raise Php 50M over the next three years to commemorate our 50 years of existence. The money would be used to fund "Societal Impact Projects." These were defined to be projects in support of the UN's Sustainable Development Goals and projects that address industry concerns. We adopted the theme "Engineering a Better Philippines." There are already discussions with potential donors for sponsored research activities. We have also received a modest donation to start the ball rolling.



Chairman:

Alex Sy Sun Eng

Members:

Alfonso A. Aliga, Jr.

Patrick Vincent G. Peña

Rafael Nestor V. Mantaring

Gilbert Santa Maria

Patrick A.D. Pascual

Victor N. Villagracia

Membership Committee

UPERDFI Strategic Objective on Membership

The Membership Committee is driven by Strategic Objective no. 3 which was defined in the UPERDFI Strategic Plan updated in the last week of February 2022:



Fully tap the network of members, alumni and partners in support of our initiatives with emphasis on membership, resource generation and administration.

Committee Membership

The Committee was reconstituted following the May 2022 election of Trustees and Officers held during the Annual General Membership Meeting.

Deliverables and Key Accomplishments

The Committee set its sights on two (2) major deliverables for the rest of 2022:

1. Conduct the annual recruitment campaign to add to the Foundation's roster of members
2. Plan and launch the Membership Engagement event to boost members' involvement with the theme of "Growing stronger @50".

The recruitment campaign resulted in the Membership Committee review of twenty-one (21) nominees. Subsequently, on September 30, 2022, the Committee recommended to the Board of Trustees their formal invitation as members of the Foundation. After one declined the nomination for personal reasons, the Foundation added twenty (20) new members for the year 2022 as follows:

Name	Degree-Year	Nominated by
Joselito D. Alzona	IE '77	A. Aliga
Walfredo C. Arias	EE '70	A. Aliga
Antonio M. Braganza	IE '74	M. Torres
Manuel R. Bulaong, Jr.	Mapua CE '82	A. Aliga
Joey B. Climaco	ECE '01	R. Miguez
Anthony N. Chiu	ChE '78	F. de la Peña
Frederick D. Chua	ECE '00	R. Miguez
Leonides R. de Ocampo	ME '93	L. de Ocampo
Raymund P. Ilustre	IE '78	A. Aliga



(L-R) Tonette Tanchuling, Chato Calderon, Babylon de Leon, Clarisa Reyes, Mag Albarracin and Art Disini



(L-R) Val Reyes, Alex Sy, Benjie Lopez, Pepe Santiago, Chato Calderon, Cesar Yniguez, Boy de la Peña and Dan Peckley, Jr.



(L-R) New Members Eric Santos, Joey Climaco and Fred Chua

Name	Degree-Year	Nominated by
Bienvenido A. Lopez, Jr.	ME '69	A. Aliga
Mario G. Magno	IE '75	A. Aliga
Jose Mari P. Mercado	IE '80	V. Reyes
Michael A. Palis	EE '79	A. Aliga
Emmanuel U. Pornillos	MetE '65	A. Aliga
Joaquin E. Quintos IV	IE '84	A. Aliga
Raymund P. Reyes	EE '83	A. Aliga
Felipe B. Santiago	EE '69	A. Aliga
Jose Carlo Eric L. Santos	CE '95	A. Aliga
Fernand Antonio A. Tansingco	EE '88	A. Aliga
Cesar E. Yñiguez	CE '69	A. Aliga

The new members were invited to the quarterly board meeting on November 16, 2022 for a formal introduction and welcome to the Foundation.

The other major initiative in 2022 was to launch the Membership Engagement event with the intent of boosting the involvement of Foundation members in the Committee work as well as ongoing projects. Given the much improved conditions of the pandemic, it was decided to hold this as a face to face event. It was held in the early evening of November 30, 2022 at the Wack Wack Social Hall with 34 attendees composed of (8) Trustees, (7) Board of Advisers and (19) members, including (6) of the new ones for 2022. The event featured a panel session with Sec Boy de la Peña, former UPERDFI Chairman & President Lilit Tumbocon and Prof. Emeritus Glen Tabios who shared how and why they got involved in the Foundation. The session

In Memoriam

We remember with fondness and deep respect the loss of our beloved members who passed away and left behind a legacy of excellence and dedication to their work:

- **Roger Victor E. Buendia**
- **Pablito R. Hao Chua**
- **Rosario Halili-Quintos**
- **Emmanuel R. Lim**

Their contributions to UPERDFI and the UP College of Engineering are immeasurable, and their passion for engineering education and research for the benefit of society will continue to inspire us all for years to come.

In their honor, we will continue to uphold the values and principles that they held dear, and strive to build on their achievements to create a brighter future for the engineering community.

May they rest in peace, and may their memories continue to inspire us to pursue our mission with the same level of commitment and passion that they exemplified throughout their lives.

also triggered a plenary discussion on resource generation and other new Foundation initiatives suggested by attendees. Five of the attendees signed up for Committee and Project involvement on the spot during the event.

Plans

For the remainder of its term, the Membership Committee is focusing on the following:

1. Sustain the infusion of additional talents and expertise through the ongoing recruitment of new members
2. Hold a virtual Membership Engagement event launch targeting over 220 members who were not able to attend the face to face event
3. Survey members' ideas on making engagement in the Foundation more fun, enjoyable and motivating
4. Boost our communication program in partnership with the UP Alumni Engineers in order to broaden the reach of the Foundation's communications via email and social media as well as to ensure that our messages move members into action and greater involvement in its initiatives.
5. Institutionalize our internal recognition program of members and the companies they represent as a way of rewarding them intrinsically and encouraging even greater participation in the Foundation's undertakings

A key measure of success moving forward is the increase in the involvement of members in Foundation work from the current 10% of our membership base. This is envisioned to trigger more concrete results that will serve not only the College of Engineering but ultimately the overall inclusive development of the Philippines. Moving forward, the Membership Committee has drawn up the Value Proposition for membership engagement in the Foundation:

Help us make the UP College of Engineering one of the best worldwide - faculty, graduates, research output, infrastructure and societal impact. Stand up and be counted!

Chairman:

Valentin A. Reyes

Adviser:

Marcelo M. Casillan, Jr.

Members:

Olegario G. Villoria, Jr.

Antonio Rivera III

Patrick A.D. Pascual

Jose Mari P. Mercado

Ramon M. De Leon

Finance Committee

With the gradual opening of the economy in 2022, the outlook seemed promising but due to multiple unforeseen conditions in the year, investments did not grow as much as expected. The PSEi remained below the 7,000 level throughout the year. Inflation was observed to be high due to economic and social matters in different countries (e.g. Russia-Ukraine War and changing US policies). This resulted to BSP increasing its interest rates. Fixed-income markets experienced negative returns thus underperforming during the year. With all of these, maturing investments with higher interest rates and investible funds from donations should be placed at low to mid rates.

Throughout the year, placements of corporate bonds (SMPH, SMC, Filinvest, and Megawide) were observed for long term returns. On the other hand, around 25% of its investment in the Sunlife Money Market Fund were redeemed; the rest were maintained for short-term needs.

The investment portfolio at the end of 2022 is as indicated below:

Subportfolio	Php Millions (at cost)	%Mix (at cost)	Php Millions (12/31/2022 MV)	%Mix (12/31/2022 MV)
Government Securities (inc. ROP)	72.7	26.7%	82.9	29.1%
Peso Government Securities	65.3	24.0%	71.5	25.1%
ROP Bonds	7.5	2.7%	11.4	4.0%
Corporate Notes	47.9	17.6%	47.9	16.8%
Time Deposit	7.2	2.6%	7.2	2.5%
Preferred Equities	5.0	1.8%	4.8	1.7%
Mutual Funds	77.8	28.6%	77.9	27.4%
Common Shares	21.0	7.7%	23.0	8.1%

Subportfolio	Php Millions (at cost)	%Mix (at cost)	Php Millions (12/31/2022 MV)	%Mix (12/31/2022 MV)
Money Market Fund (Sunlife)	15.5	5.7%	15.8	5.6%
Cash Available for Reinvestment	25.1	9.2%	25.1	8.8%
Total	272.3	100.0%	284.6	100.0%

The FinComm will continue to think of ways to improve the investment situation of the UPERDFI to take advantage of the country's efforts of opening the economy after years in the pandemic. The FinComm will also undertake a continuing review of its investment policies considering the needs of the constantly changing environment.



Chairman:

Michael V. Gonzalez

Members:

Edgardo G. Atanacio Alfonso Aliga, Jr.
Rizalina Gervasio-Mantaring Victor N. Villagracia
Rene E. Nolasco

Audit Committee

The Audit Committee is tasked with providing assurance by assessing and reporting on the reliability of financial statements and supporting accounting records. To achieve this, the Audit Committee performs timely reviews of operations and liaise with the independent auditor in undertaking the statutory audits on the Foundation.

The Audit Committee joined the Executive Director, Treasurer, Comptroller and the Finance Committee in initiating the 2022 audit process with SGV & Co., our independent auditor, and will address action steps as called for by the audit report.



Chairman:

Lisa Grace S. Bersales
Robert O. Minguez II (February 2023)

Members:

Joselito G. Florendo
Edgardo P. Kasilag II
Maria Antonia N. Tanchuling

Governance Committee

With the assistance of the Governance Committee, the final preparation and eventual procurement of the high performance computer to be donated to the UP College of Engineering was done in June 2022, and the equipment delivered in September 2022, which was sourced from the USA.

The Committee has initiated the inventory and consolidation of all governance documents and issuances into a Value Management System framework, in order to identify and fill up gaps in the various aspects of corporate governance. This process has been a significant undertaking, and we appreciate the Committee's commitment to this critical task. We are confident that this framework will enhance our overall governance structure and align our processes with best practices.

In addition to this, a new Membership Policy has been ratified by the Board of Trustees. We believe that this policy will strengthen our Foundation's membership base and help us to develop a robust community of stakeholders who share our commitment to our mission and values.

We would like to express our gratitude to the Board of Trustees for their unwavering commitment to enhancing the Foundation's governance structure. Their guidance, expertise, and support have been invaluable in helping us achieve these significant milestones. We remain steadfast in our commitment to transparent, accountable, and responsible governance, and we look forward to working together to achieve our strategic objectives.



Chairman:

Manuel H. Torres

Members:

Antonio M. Braganza Jose Jerome R. Pascual III
Ramon M. De Leon Felipe B. Santiago
Gaudencio Renato T. Goco Cesar E. Yniguez
Bienvenido A. Lopez, Jr.

UPERDFI: THE NEXT 50 YEARS

As we close the first 50-year chapter in our foundation's history, we continue our forward-thinking and determine how best the UPERDFI can take part in creating a better Philippines. While we are committed to support the UP College of Engineering, we must consider: *What direction must we go from this point onward? How can we harness support for the search and implementation of engineered solutions for the social, economic and environmental concerns that impact our country? In what ways must we capitalize on our resources and networks?*

The 2020 pandemic and subsequent events in some parts of the world demonstrated the impact of a global disruption, which required crafting solutions based heavily on science, technology and engineering on the run. Be that as it may, such events will continue to happen, testing the ability of mankind to address them.

Our mantra for our first 50 years was to be a major player in building the technological competencies in R&D, technology generation and manpower for our country. This continues to be at the heart of our efforts!

For the immediate future, UPERDFI will have to continue with our legacy initiatives – faculty, student, infrastructure development and R & D (which prioritizes those with direct benefits to society). From the Dean's Report as detailed in this Annual Report, the UP College of Engineering is going to be the core of the National Institutes of Engineering. Like the National Institutes of Health in UP Manila, such a set up will be the convergent point of interdisciplinary R&D and applications. While our support for faculty, students and facilities will have to continue, our R&D support initiatives must be strengthened.

Thus, our resource generation and management efforts will need to be redoubled. The U.S. Roadshows in 2014 and 2018 increased awareness of our priorities and expanded our network to our U.S.-based UP alumni organizations and friends, who generously donated to our high-impact projects, such as for the College's student wellness program and for high-performance computing projects.

For the next 50 years, we should look forward to helping our country be better prepared and more proactive to progressive developments and disruptive/unfamiliar events that are long-lasting. Developments in the education sector will shape current and future initiatives, and we see the UPERDFI at the forefront, supporting COE in the battle for technological competitiveness.

The most immediate need is financial assistance for students who cannot afford the costs to fully participate in hybrid-mode learning. The shift to experiential learning that started with the Outcomes-Based Approach adopted by the College some 15 years ago requires more concrete efforts in linking the College with industry and supporting student projects. Hybrid learning can be upgraded with alumni-student mentoring programs.

Specific to the Philippines, the urgent need is to invest in programs that address basic food, water, and shelter requirements to serve the growing population. Power and alternative sources of energy remain high on the agenda to spur socio-economic development across the country. Since science and technology play a huge part in how the world will evolve, it is important for the UPERDFI to work closer than ever with the College of Engineering to promote its use and equally important, deliver the human and infrastructure resources to create significant impact in the country's development.

We continue to put emphasis on UPERDFI being a bridge in bringing the intellectual capital of UPCOE to impact society. The only major modification being that while UPCOE remains as a primary stakeholder, we will tap other resources to carry out projects that will be undertaken.

We have also learned that planning is an easier task, and execution is harder. We must mobilize a larger band of doers among our members, who will also bring in their respective networks to bear, thus exponentially increasing our resource and action base. There are opportunities to cast a wider net and reach out to current and prospective members of the foundation with the help of technology. There is a potential need to continue increasing our international presence across the globe to harness the networks of UP alumni in what will perhaps become a smaller, more interactive, and ironically virtual world where information will be key.

We can summarize our move-forward efforts in three words - DOABLES, DOERS, DONORS. We will identify high-impact programs and projects (DOABLES); organize the effort (DOERS); and raise funds and generate needed resources (DONORS). This approach will make UPERDFI a powerful enabler to help the country experience better education, improve the quality of life of its citizens, achieve economic growth, and be globally competitive.

God bless UPERDFI, the UPCOE, and the Philippines!

ANNEX 1: LIST OF DONATIONS IN 2022

	Donor	Donation	Amount
Faculty Development			
1	Access Water Integrators and Equipment Phils., Inc	Cerlito San Juan Professorial Chair Award	120,000.00
2	Allado Construction Company Inc.	Honorio and Elisa Allado Professorial Chair Award	120,000.00
3	AMH Philippines, Inc.	AMH Philippines Professorial Chair Award	120,000.00
4	Analog Devices Gen. Trias, Inc.	Analog Devices Professorial Chair Award	240,000.00
5	ANTA Construction Corporation	Antonio Tan Giok Khun Professorial Chair Award	120,000.00
6	Antonio Tanchuling, Jr.	Antonio and Lourdes Tanchuling Professorial Chair Award	120,000.00
7	Apolonio and Lorna Yson (via FUPFA)	Apolonio and Lorna Yson Professorial Chair Awards (2)	240,000.00
8	Brian Tan Engineering Consultancy Services	David Y. Tan Professorial Chair Award	120,000.00
9	Cenon and Mimilyn Carolino (via FUPFA)	Cenon and Mimilyn Carolino Teaching and Research Award	60,897.60
10	CleanTech Foundation, Inc.	CleanTech Global Renewables Professorial Chair Award	120,000.00
11	DCCD Engineering Corporation	DCCD Engineering Professorial Chair Award	120,000.00
12	DMCI Project Developers, Inc.	DMCI Project Developers Professorial Chair Awards and Teaching and Research Awards	600,000.00
13	Elzar Lorenzana Simon	Elzar Lorenzana Simon Professorial Chair Award	117,207.08
14	Emmanuel U. Pornillos	Emmanuel Pornillos Professorial Chair Award	120,000.00
15	Felicidad Z. Reyes	Prof. Felisberto G. L. Reyes Professorial Chair Award	120,000.00
16	Focus Global Inc.	Focus Global Inc. Professorial Chair Award	120,000.00
17	Geotechnics Philippines, Inc.	Geotechnics Philippines, Inc. Professorial Chair Award	120,000.00
18	Globe Telecom, Inc.	Globe Telecom Professorial Chair Award	120,000.00
19	Jennifer Lynn Cua (via FUPFA)	Ernesto and Evelyn Cua Professorial Chair Awards and Teaching and Research Awards	195,863.22
20	Jerome H. Cainglet	Jerome and Mary Iralyn Cainglet Professorial Chair Award (2 Years)	240,000.00
21	Jose Edgard Manrique (via FUPFA)	Jose Edgar Manrique Professorial Chair Award	121,795.20
22	Levyrox Corporation	Levy Espiritu Professorial Chair Award	120,000.00
23	Longridge Construction, Inc.	Longridge Construction Professorial Chair Award	120,000.00
24	M.E. Sicat Construction, Inc.	M.E. Sicat Construction, Inc. Professorial Chair Award	120,000.00
25	Ma. Aura Teodora Matias	Dr. Maria Aura Teodora C. Matias; and Renato Bernales Matias Professorial Chair Awards	240,000.00
26	Ma. Eloisa N. Francisco	Jesus P. Francisco Professorial Chair Award	371,000.00
27	Manuel R. Bulaong, Jr.	Manuel and Leticia Bulaong Teaching and Research Awards	120,000.00
28	Manuel V. Pangilinan	Manuel V. Pangilinan Professorial Chair Award	120,000.00

29	Maynilad Water Services, Inc.	Maynilad Water Services Professorial Chair Awards (3)	360,000.00
30	Michael V. Gonzalez	Felix M. Gonzalez Professorial Chair Award	120,000.00
31	Olegario Villoria, Jr. (via FUPFA)	Dr. Olegario G. Villoria, Jr. Professorial Chair Award (6 Years)	736,903.92
32	Orchards of the Abba Corporation	Orchards of the Abba Corporation Professorial Chair Award	120,000.00
33	People's Asia Pacific Construction Corporation	Domingo Toledo Professorial Chair Award	120,000.00
34	PetroEnergy Resources Corporation	PetroEnergy Resources Professorial Chair Award	120,000.00
35	Philippine Society For Soil Mechanics and Geotechnical Engineering, Inc.	Dr. Salvador Reyes Professorial Chair Award	120,000.00
36	Phinma Foundation, Inc.	Deans Juan L. Tiongson; Oscar P. Baguio; Ruben A. Garcia; Francisco L. Viray; Reynaldo B. Ve; and Marino Mena Professorial Chair Awards	720,000.00
37	PLDT-Smart Foundation, Inc.	PLDT-Smart Foundation, Inc. Professorial Chair Award	120,000.00
38	Renato R. Bello (via FUPFA)	Antonio and Leticia R. Bello Professorial Chair Award	121,795.20
39	Ronaldo S. Ison	Ronaldo S. Ison Professorial Chair Award	120,000.00
40	Rosario Calderon and Brenton Calderon Marrelli (via FUPFA)	Quintin and Norma Calderon Professorial Chair Award	121,795.20
41	San Miguel Holdings Corporation	SMC Infrastructure Professorial Chair Award (6 Years)	1,800,000.00
42	Segovia & Co., Inc.	Jose Segovia Professorial Chair Award	50,000.00
43	Semirara Mining Corporation	Semirara Mining Corporation Professorial Chair Awards	2,660,009.28
44	Simon Sandoval and Victor Sandoval	Concepcion H. Sandoval Professorial Chair Award	120,000.00
45	SteelAsia Foundation, Inc.	Don Benito Yao Professorial Chair Award	120,000.00
46	Stephen D. Sy	Stephen D. Sy Professorial Chair Award	120,000.00
47	VantageOne Financing Corporation (Carmen V. F. Serifa)	Fernando N. Serifa Professorial Chair Award	120,000.00
48	WITCO Construction and Development Corporation	Dr. Meliton R. Ordillas, Jr. Professorial Chair Award	120,000.00
Sub-total Faculty Development			12,597,266.70
Student Support			
49	Alvarez Foundation Philippines	Alvarez Foundation Scholarships	292,000.00
50	Antone Granada (via FUPFA)	Eriberta Rocha Granada Scholarship	137,587.20
51	Apolonio and Lorna Yson (via FUPFA)	Apolonio and Lorna Yson Scholarship	67,532.88
52	BA Foundation (Francis Chua)	UPC 2022 - Dr. Francis Chua Innovation Awards	300,000.00
53	Denso Ten Solutions Philippines Corporation	Denso Ten Scholarships	60,000.00
54	Dr. Rajeev Magno Advani and Dr. Vriti M. Advani	Manuel and Carmen Magno Scholarship	25,000.00
55	Ferdinand M. Dela Cruz	ICE Academic Excellence Award	20,000.00
56	Foxmont Advisory Services Inc	Foxmont Masteral Grant	50,000.00
57	George and Lilibeth Aristorenas	George and Lilibeth Aristorenas Thesis Support Grants	20,000.00
58	GT Foundation, Inc.	GT Foundation Scholarships	735,000.00
59	Interplan Management Inc. (Evelyn Mayuga)	UPAABC Scholarship Fund	32,000.00
60	Ismael and Cristina Pugeda (via FUPFA)	Ismael and Cristina Pugeda Scholarship	50,748.00
61	Jollibee Group Foundation, Inc.	UPIEAA Achievers Program	60,000.00

62	Jose L. Albano (via FUPFA)	Jose L. Albano Thesis Support Grants	50,748.00
63	Josephine Santiago Bond (via FUPFA)	Josephine Santiago Bond Thesis Support Grants	20,299.20
64	Jude Tadeo Salac (via FUPFA)	Jude Tadeo Salac Thesis Support Grants	20,299.20
65	Longridge Construction, Inc.	Longridge Construction Thesis Support Grants	100,000.00
66	Manuel Cantoria Magno (via FUPFA)	Manuel and Carmen Magno Scholarship	12,687.00
67	Mario G. Magno (via FUPFA)	Manuel and Carmen Magno Scholarship	22,649.60
68	Megaworld Foundation, Inc.	Megaworld Foundation Scholarships	562,500.00
69	Michael V. Gonzalez	Pay-Engg Forward Scholarships	240,000.00
70	Multiflex RNC Philippines Corporation	Robert Cheng Uratex Scholarships	280,000.00
71	Obelisk Corporation	Quintin Calderon ICE Student Award	15,000.00
72	Olegario G. Villoria, Jr. (via FUPFA)	Olegario G. Villoria, Jr. Thesis Support Grants	21,314.16
73	Patricia Coseteng (Rey Marketing)	Edwin Coseteng Scholarships	120,000.00
74	PMC-MMPRC Foundation, Inc.	Philsaga Scholarships and Board Exam Review Support	300,000.00
75	Ricardo Rodriguez	Thesis Support Grant	10,000.00
76	RL Royal Prime Construction Company	RI Royal Prime Construction Scholarship	73,349.28
77	Rowena Torres Ordoñez	Jose Torres and Teodorico Festin Student Awards and Thesis Support Grant	25,000.00
78	Sherwin O	Sherwin O Thesis Support Grants	20,000.00
79	UP Alumni Association of British Columbia (UPAABC) c/o Anita Aytona	UPAABC Scholarships	160,000.00
80	UP Alumni Association of Greater Los Angeles Area (UPAAGLA)	UPAAGLA Thesis Support Grants	249,987.40
81	UP Alumni in Minnesota (UPAM)	UPAM Scholarship Fund	27,436.97
82	Dr. Vriti Magno Advani (via FUPFA)	Manuel and Carmen Magno Scholarship	50,748.00
Sub-total Student Support			4,231,886.89
Research and Development			
83	Dr. Luis Pascual (via FUPFA)	Sponsored Research Grant	573,280.00
84	The Murata Science Foundation	Murata Science Foundation Research Grant	693,283.20
Sub-total Research and Development			1,266,563.20
Infrastructure and Laboratories			
85	Denis and Martha Carpio	High Performance Computing Project	3,000,000.00
86	ACE Electronic Technology, Inc.	High Performance Computing Project	500,000.00
87	SLC Realty and Management Corporation	High Performance Computing Project	500,000.00
88	Friends of UP Foundation in Amercia (FUPFA)	High Performance Computing Project	6,505,391.75
89	UP Foundation, Inc.	High Performance Computing Project	4,000,000.00
90	Bakas Pilipinas	Diana FEA Software	27,152.86
91	AMH Philippines, Inc.	Diana FEA Software	8,447.50
92	OceanaGold Philippines, Inc.	DMMME Laboratory Modernization	4,000,000.00

Sub-total Infrastructure and Laboratories			18,540,992.11
UPERDFI Golden Jubilee			
93	Abelardo P. Basilio	UPERDFI Golden Jubilee	25,000.00
94	ACE Electronic Technology, Inc.	UPERDFI Golden Jubilee	100,000.00
95	Alexis Philip A. Acacio	UPERDFI Golden Jubilee	20,000.00
96	Anonymous	UPERDFI Golden Jubilee	25,000.00
97	ANTA Construction Corporation	UPERDFI Golden Jubilee	50,000.00
98	Antonio M. Ostrea	UPERDFI Golden Jubilee	50,000.00
99	Benedict T. Laogan	UPERDFI Golden Jubilee	50,000.00
100	Cesar E. A. Virata	UPERDFI Golden Jubilee	50,000.00
101	Daniel C. Peckley Jr.	UPERDFI Golden Jubilee	14,000.00
102	DCCD Engineering Corporation	UPERDFI Golden Jubilee	50,000.00
103	Delfin Lazaro	UPERDFI Golden Jubilee	100,000.00
104	Denis and Martha Carpio	UPERDFI Golden Jubilee	100,000.00
105	Dr. Luis Pascual (via FUPFA)	UPERDFI Golden Jubilee	56,400.00
106	Edgar O. Chua	UPERDFI Golden Jubilee	20,000.00
107	Editha Junio Atienza	UPERDFI Golden Jubilee	50,000.00
108	Edmundo G. Fortunado	UPERDFI Golden Jubilee	50,000.00
109	Elmir S. Dela Cruz	UPERDFI Golden Jubilee	30,000.00
110	Emilio Lolito J. Tumbocon	UPERDFI Golden Jubilee	50,000.00
111	Ferdinand M. Dela Cruz	UPERDFI Golden Jubilee	50,000.00
112	Filemon T. Berba, Jr.	UPERDFI Golden Jubilee	50,000.00
113	Focus Global Inc. / Stephen D. Sy	UPERDFI Golden Jubilee	100,000.00
114	Fortunato T. Dela Peña	UPERDFI Golden Jubilee	20,000.00
115	Francisco L. Viray	UPERDFI Golden Jubilee	100,000.00
116	Guillermo Q. Tabios III	UPERDFI Golden Jubilee	50,000.00
117	Jose Ernesto C. Villaluna, Jr.	UPERDFI Golden Jubilee	20,000.00
118	Jose Jerome R. Pascual III	UPERDFI Golden Jubilee	50,000.00
119	Jose Maria A. Ochave	UPERDFI Golden Jubilee	20,000.00
120	Lorenzo G. Formoso III	UPERDFI Golden Jubilee	100,000.00
121	Marcelo M. Casillan, Jr.	UPERDFI Golden Jubilee	10,000.00
122	Meneleo J. Carlos Jr.	UPERDFI Golden Jubilee	100,000.00
123	Myrna Dela Paz	UPERDFI Golden Jubilee	10,000.00
124	Olegario Villoria, Jr.	UPERDFI Golden Jubilee	50,000.00
125	One Small Step Forward Foundation, Inc. / Bing and Elise del Rosario	UPERDFI Golden Jubilee	150,000.00
126	Osorio Calejesan Jr.	UPERDFI Golden Jubilee	5,000.00

127	Pedrito T. Dy	UPERDFI Golden Jubilee	55,000.00
128	Pedro H. Maniego Jr.	UPERDFI Golden Jubilee	25,000.00
129	Rafael Nestor V. Mantaring	UPERDFI Golden Jubilee	100,000.00
130	Ramon B. Segismundo	UPERDFI Golden Jubilee	100,000.00
131	Raul C. Villanueva	UPERDFI Golden Jubilee	50,000.00
132	Reynaldo B. Vea	UPERDFI Golden Jubilee	50,000.00
133	Rogelio M. Murga	UPERDFI Golden Jubilee	20,000.00
134	Sterling Paper Products / Henry Lim	UPERDFI Golden Jubilee	50,000.00
135	UP IE Ligaya Barkada c/o Rogelio L. Singson	UPERDFI Golden Jubilee	50,000.00
136	Vernon R. Aliga	UPERDFI Golden Jubilee	50,000.00
137	Victor N. Villagrancia (via FUPFA)	UPERDFI Golden Jubilee	57,328.00
138	Virgilio S. Santos	UPERDFI Golden Jubilee	50,000.00
Sub-total Golden Jubilee Fund			2,432,728.00
Special Projects			
139	Christine Co	UPIEAA DIEOR Golden Pillars	10,000.00
140	Denis and Martha Carpio	DChE-Catalyzing Honor & Excellence	2,000,000.00
141	Henry Rophen Virola	UPIEAA DIEOR Golden Pillars	10,000.00
142	Joseph Michael Castro	UPIEAA DIEOR Golden Pillars	50,000.00
143	Lourdes Fabros	UPIEAA DIEOR Golden Pillars	10,000.00
144	Nilo Roman Siongco	UPIEAA DIEOR Golden Pillars	10,000.00
145	Randolf Flauta	UPIEAA DIEOR Golden Pillars	10,000.00
146	Seaoil Philippines, Inc.	Tau Alpha Infinity Walk	1,000,000.00
147	The Japan Foundation Manila	UPSCALE - The Japan Foundation Manila WE Project	424,000.00
148	VistaLand and Lifescapes, Inc.	UPSCALE - Vista Land (COIR Project)	420,408.25
Sub-total Special Projects (Pass-through)			3,944,408.25
Administration			
149	Anonymous	Admin Fund	15,000.00
150	Diliman Integrated Technical Consultancy, Inc.	Admin Fund	21,200.00
151	Francis and Leah Felizardo	Admin Fund	10,000.00
152	Unidentified	Admin Fund	240,000.00
Sub-total Administration			286,200
TOTAL DONATIONS (2022)			43,300,045.15

ANNEX 2: LIST OF PROFESSORIAL CHAIR AWARDS

AY 2022-2023

	Chair Name and Donor	Awardee (Dept/Inst)	Research Title
Category 4 (300,000)			
1	ALEJANDRO MELCHOR PROF. CHAIR IN ENGINEERING Dr. Magdaleno B. Albarracin, Jr. and DMCI Holdings	Tanchuling, Maria Antonia N. (ICE)	Extended Producer Responsibility (EPR) Scheme Assessment for Plastic Waste Packaging in the Philippines
Category 3 (240,000)			
2	ANALOG DEVICES, INC. PROF. CHAIR Analog Devices Gen. Trias, Inc.	Alarcon, Louis (EEEI)	Center for Integrated Circuits and Devices Research (CIDR) Applied Research Centers: Enabling Sustainable Development
3	DADO & MARIA BANATAO PROF. CHAIR 01 Dado and Maria Banatao Institute	Atienza, Rowel (EEEI)	Improving Model Generalization by Agreement of Learned Representations from Data Augmentation
4	DADO & MARIA BANATAO PROF. CHAIR 02 Dado and Maria Banatao Institute	Festin, Cedric Angelo (DCS)	Survey of Digital Contact Tracing Applications for COVID-19 in the Philippines
5	DADO & MARIA BANATAO PROF. CHAIR 03 Dado and Maria Banatao Institute	Naval, Prospero (DCS)	COViT-GAN: Vision Transformer for COVID-19 Detection in CT Scan Images with Self-Attention GAN for Data Augmentation
Category 2 (120,000)			
6	DEAN ALFREDO L. JUINIO PROF. CHAIR A. L. Junio Family and Friends	Antonio, Oscar Victor M., Jr. (ICE)	Application of Augmented Reality in Structural Analysis and Construction Monitoring
7	AMBROSIO MAGSAYSAY PROF. CHAIR IN ENGINEERING A. Magsaysay Corporation	Regidor, Jose Regin F. (ICE)	Safe Journeys for Schoolchildren – Data and Statistics on Child Road Traffic Injury Prevention (CRTIP)
8	MAYNILAD UP CENTENNIAL PROF. CHAIR Maynilad Water Services, Inc.	Herrera, Eugene C. (ICE)	Modeling dissolved oxygen dynamics and hypoxia: the case of hypoxic water mass movement in Manila Bay
9	DR. MAGDALENO B. ALBARRACIN JR. UP CENTENNIAL PROF. CHAIR IN ENGINEERING AB Capital / Union Galvasteel/ Bacnotan Consolidated/ Phinma/ Transasia Oil & Energy/ Phinma Property Holdings	Tumolva, Terence, P. (DChE)	Synthesis and characterization of NaCMC/HEC/activated carbon hydrogel composites for the desalination of seawater
10	ALEXAN PROF. CHAIR Ace Electronics Technology, Inc. (ALEXAN)	Tiglaio, Nestor Michael (EEEI)	Hardware-Accelerated Blockchain-Based Authentication for the Internet of Things
11	SY LING CHAT PROF. CHAIR Alex Sy Sun Eng & Benjamin Sy	Ramos, Roseanne V. (DGE)	Integrated GIS and air dispersion modeling approach for roadside pollutant mapping: a case study in Baguio City, Philippines.
12	HONORIO AND ELISA ALLADO PROF. CHAIR IN CIVIL ENGINEERING Allado Construction Co., Inc.	Sadie, Noriza T. (ICE)	Comparative Life Cycle Assessment (LCA) For the Import, Manufacture, Disposal Method of Cassava Bioplastics
13	AMH PHILIPPINES PROF. CHAIR IN CIVIL ENGINEERING AMH Philippines, Inc.	Baniqued, Julius Rey D. (ICE)	Comparison of Existing Non-Expert Seismic Screening Tools for Low-Rise Concrete Structures in Terms of Evaluating Risk to Property and Risk to Life
14	ANTONIO G. TAN GIOK KUN PROF. CHAIR IN CIVIL ENGINEERING ANTA Construction Corporation	Hernandez, Jaime Jr. Y. (ICE)	Unconventional Design of Houses for a Sustainable Environment
15	APOLONIO P. & LORNA L. YSON PROF. CHAIR IN ME Apolonio and Lorna Llave Yson	Quiros, Edwin N. (DME)	Improving fuel economy on chassis dynamometer using air-conditioner correction factors

16	APOLONIO P. & LORNA L. YSON PROF. CHAIR IN CHE Apolonio and Lorna Llave Yson	De Leon, Rizalinda L. (DChE)	DFT Simulation of HCl leaching over cellulase-mimetic solid acid catalyst
17	LAGMAN FAMILY PROF. CHAIR IN ENGINEERING Augusto C. Lagman	Alamani, Bryan, G. (DChE)	Environmentally benign and biocompatible sensing platform for electroanalytical determination of bisphenol A in the aquatic environment
18	RENATO M. TANSECO PROF. CHAIR IN ME Automated Technology Philippines, Inc.	Balbarona, Juvy A (DME)	Robust two-step process for the fabrication of superhydrophobic copper and brass for heat transfer enhancement
19	BETA EPSILON PROF. CHAIR Beta Epsilon Fraternity	Acacio, Alexis Philip A. (ICE)	Managing Geotechnical Engineering Projects
20	PROF. DOMINADOR ILIO PROF. CHAIR Beta Epsilon Fraternity	Soriano, Jaymar (DCS)	Implementation and analysis of traffic dynamics on a signalized four-lane four-segment intersection in LocalSim
21	VICENTE & JUANITA HAO CHIN PROF. CHAIR (1) Borland Development Corporation	Macapinlac, Oliver T. (DGE)	"Evidence-based Monitoring of Geospatial Web Data in the Philippines - A Case for LUZIS"
22	VICENTE & JUANITA HAO CHIN PROF. CHAIR (2) Borland Development Corporation	Reyes, Rosalie B. (DGE)	Rise or Fall? How local factors affect coastal sea level
23	FERNANDO N. SERIÑA PROF. CHAIR IN ME Carmen V.F. Serriña / VantageOne Financing Corporation	Denoga, Gerald Jo C. (DME)	Bending Stiffness and Dynamic Mechanical Properties of Filament-Wound Glass Fiber-Reinforced Thermosetting Resin Pipe with Non-reinforced Resin Internal Lining
24	CERLITO SAN JUAN AND FAMILY PROF. CHAIR Cerlito San Juan and Family / Houston Hydrotech Products and Systems, Inc.	Callanga, Jennifer F. (DME)	Failure Analysis of a Composite Horizontal Axis Tidal Turbine Blade Using ANSYS ACP
25	CHUA LIONG AND LORETA DY CHUA PROF. CHAIR Chua Liong and Loreta Dy Chua	Baynosa, Marjorie, L. (DChE)	Three-dimensional core-shell heterostructure of tungsten trioxide/bismuth molybdate/cobalt phosphate for enhanced photoelectrochemical water splitting
26	CIRIACO PROF. CHAIR IN CIVIL ENGINEERING Ciriaco Corporation	Victor, Jaime Angelo S. (ICE)	Assessment of Remotely Sensed Antecedent Soil Moisture for the Development of a Framework for Landslide Early Warning: a Case Study of Benguet
27	BEATRIZ BASA-ALTURA PROF. CHAIR IN CE Claudio B. Altura	Quinay, Pher Errol B. (ICE)	Finite Element Model Generation of Shear Wall-Frame Systems with Varying Configurations Using a Combined Quadtree-Octree Partitioning
28	CLEANTECH GLOBAL RENEWABLES PROF. CHAIR IN RENEWABLE ENERGY CleanTech Global Renewables	Cervera, Rinlee Butch M. (DMMME)	Effects of Oxygen Partial Pressure and Substrate Temperature on the Structure and Morphology of Sc and Y Co-Doped ZrO ₂ Solid Electrolyte Thin Films Prepared via Pulsed Laser Deposition
29	CONCEPCION HIDALGO SANDOVAL MEMORIAL FOUNDATION PROF. CHAIR Concepcion Hidalgo Sandoval Memorial Foundation	Cajote, Rhandley (EEEE)	Object Detection in Aerial Images with Attention-based Regression Loss
30	DATEM & ACES PROF. CHAIR DATEM, Inc.	Diola, Nathaniel B. (ICE)	Durability issues in marine concrete construction
31	JORGE M. CONSUNJI PROF. CHAIR IN ENGINEERING DMCI Holdings, Inc.	Lumbera, Maxell P. (ICE)	Water Audit of Selected Buildings in UP Diliman
32	DCCD ENGINEERING CORPORATION PROF. CHAIR DCCD Engineering Corporation	Caram, Rosabelle Louise (ICE)	Physical and Morphological Investigation of the Utilization of Expanded Perlite as Fine Aggregate for Type M Structural Lightweight Mortar
33	DILIMAN INTEGRATIVE TECHNICAL CONSULTANCY, INC. PROF. CHAIR Diliman Integrative Technical Consultancy, Inc. (DITCI)	Jalao, Eugene Rex L. (IEORD)	A Decision Support System to Hit Target Sample Distribution Quota and Consumers on Outdoor Product Sampling
34	DAVID M. CONSUNJI PROF. CHAIR IN ENGINEERING DMCI Holdings, Inc.	Palmiano, Hilario Sean O. (ICE)	Signal Timing Optimization of Oversaturated Isolated Signalized Intersection Considering Temporal Oversaturation Severity Index
35	DMCI PROJECT DEVELOPERS PROF. CHAIR 1 DMCI Project Developers	Germa, Fernando J. (ICE)	Application of ASCE 41 Linear Analysis Procedure in Reinforced Concrete Moment Frames
36	DMCI PROJECT DEVELOPERS PROF. CHAIR 2 DMCI Project Developers	Tingatinga, Eric Augustus J (ICE)	Recent Advances in the Use of Pushover Analysis in Retrofitting of RC Buildings

37	DMCI PROJECT DEVELOPERS PROF. CHAIR 3 DMCI Project Developers	Torio-Kaimo, Lestelle V. (ICE)	Potential of Abaca fiber as alternative material for Fiber-reinforced soil
38	DOMINGO TOLEDO PROF. CHAIR Domingo Toledo Family / Peoples Asia Construction Corp.	Ejera, Stan Kristian G. (DMMME)	Failure Analysis of a Failed Ferrous Tube
39	DON FELIPE SAY & THERESA CHUA SAY PROF. CHAIR Don Felipe Say and Theresa Chua Say	Ballesteros, Florencio Jr. (DChE)	Supporting Circularity in WEEE Management in the context of health risk reduction: A Strategy for the Global South
40	ANTONIO AND LOURDES TANCHULING MINING ENGINEERING CENTENNIAL PROF. CHAIR Dr. Antonio N. Tanchuling, Jr.	Menor, Terence Lucero F. (DMMME)	Dissolution Behavior and Kinetics of Saprolitic Laterite in Sulfuric Acid: Comparison with Goethitic Laterite
41	DR. LUIS D. PASCUAL PROF. CHAIR IN SYSTEMS THINKING AND SYSTEM DYNAMICS Dr. Luis D. Pascual	Lagria, Raymond Freth A. (IEORD)	A Systems Dynamics Approach to Disaster Management Logistics in the Philippines
42	RENATO BERNALES MATIAS PROF. CHAIR IN IE Dr. Maria Aura Teodora C. Matias	Jalao-Grepo, Lorelie C. (IEORD)	IE students' perceived workload, stress and fatigue during the remote setup: A semester-long study
43	DEAN JUAN L. TIONGSON PROF. CHAIR Dr. Magdaleno B. Albarracin, Jr.	Feria, Rommel (DCS)	ClarifEye: Designing a teleophthalmology mobile application
44	DEAN OSCAR P. BAGUIO PROF. CHAIR Dr. Magdaleno B. Albarracin, Jr.	Magdaluyo, Eduardo R., Jr (DMMME)	Effect of reaction time in the crystallographic, infrared spectral and surface charge characteristics of Polyethylene glycolated AgFeO ₂ NPs
45	DEAN RUBEN A. GARCIA PROF. CHAIR Dr. Magdaleno B. Albarracin, Jr.	Cabarle, Francis George (DCS)	A Web Framework For Spiking Neural P Systems
46	DEAN FRANCISCO L. VIRAY PROF. CHAIR Dr. Magdaleno B. Albarracin, Jr.	Tria, Lew Andrew (EEEE)	Modeling of a Modular Stator Segmented Rotor Switched Reluctance Motor for Circuit Simulation
47	DEAN REYNALDO B. VEA PROF. CHAIR Dr. Magdaleno B. Albarracin, Jr.	Villar, John Justine (DCS)	Evaluation of Different Forecasting Methods for the Estimation of Cargo Throughput in Manila International Container Terminal, Philippines
48	DR. MARIA AURA TEODORA C. MATIAS DIEOR GOLDEN JUBILEE PROF. CHAIR IN HUMAN FACTORS AND ERGONOMICS Dr. Maria Aura Teodora C. Matias	Custodio, Benette P. (IEORD)	Postural Assessment of Home Study Space of UPD DIEOR Undergraduate students
49	DR. OLEGARIO G. VILLORIA, JR. PROF. CHAIR Dr. Olegario G. Villoria, Jr.	Ang, Rosario (DGE)	Verification of the Tropical Storm Risk (TSR) tropical cyclone gust footprint
50	RECIÑAS-SIMON PROF. CHAIR Mr/Mrs Dave and Corinne Reciñas-Simon	Adolacion, Jay R, T. (DChE)	Sediment and their bacterial communities in an industrialized estuary after Hurricane Harvey
51	ELZAR LORENZANA SIMON DIEOR GOLDEN JUBILEE PROF. CHAIR IN ARTIFICIAL INTELLIGENCE Mr. Elzar L. Simon	Remolona, Miguel Francisco, M. (DChE)	Transformer-based approach to Variable Typing
52	PROF. ALFREDO B. JUINIO, JR. PROF. CHAIR IN CIVIL ENGINEERING Erlina Juinio and Family	Zarco, Mark Albert H. (ICE)	On the calculation of radial spring constants of bored piles of finite length
53	PROF. FELISBERTO G. L. REYES PROF. CHAIR Ms. Felicidad Zafrá-Reyes	Carcellar, Bienvenido (DGE)	Utilizing Big Geospatial Data for Spatiotemporal Analysis of Built Environment
54	FF CRUZ PROF. CHAIR IN GEODETIC ENGINEERING F.F. Cruz & Co., Inc.	Principe, Jeark A. (DGE)	Land Cover Change Dynamics and Socioeconomic Impacts of Areas Converted to Solar Farms
55	"FILMINERA PROF. CHAIR IN MINING ENGINEERING" Filminera Mining Corporation	Tungpalan, Djoan Kate T. (DMMME)	Rapid estimation of process performance based on meso-scale ore texture
56	H.B. REYES ME CENTENNIAL PROF. CHAIR Ms. Filomena Reyes-Carlos and Mr. Meneleo Carlos, Jr.	Abuan, Binoe (DME)	Numerical Investigation on the Effects of Varying the Arc length of a Windshield on the Performance of a Highway Installed Banki Wind Turbine
57	FOCUS GLOBAL INC. PROF. CHAIR IN ENGINEERING Focus Global Inc.	Llaguno, Erickson L. (IEORD)	Application of a Change Management Model in the Adoption of New Technology on Rice Production in the Philippines

58	GE PHILS. METER & INSTRUMENT CO. PROF. CHAIR GE Philippines	Hizon, John Richard (EEEE)	Asymmetric Charge Transfer Scheme Model in ML-SSHC with Consistent Power Extraction Improvement for Piezoelectric Energy Harvesters
59	GLOBE TELECOM INC. PROF. CHAIR IN ECE Globe Telecom Inc.	Pedrasa, Jhoanna Rhodette (EEEE)	Wireless Sensor Networks for Telerehabilitation of Parkinson's Disease Using Rhythmic Auditory Stimulation
60	HOLCIM PROF. CHAIR Holcim Philippines	Resurreccion, Augustus C. (ICE)	Solid Waste Management Recommendations of Tourism Areas in the Islands of Batanes
61	INTEGRATED MICROELECTRONICS INC. PROF. CHAIR Integrated Microelectronics, Inc.	Diaz, Leslie Joy L. (DMMME)	Development of Reusable Facemasks Using Biodegradable Filters in Balancing Health and Environmental Needs at this Time of the Pandemic
62	ERNESTO & EVELYN CUA PROF. CHAIR IN COMPUTER SCIENCE Ms. Jennifer Lynn Cua	Figuroa, Ligaya Leah (DCS)	Modelling the effect of deprived physical urban environments on academic performance in the Philippines
63	JEROME & MARY IRALYN CAINGLET PROF. CHAIR IN CHEMICAL ENGINEERING Jerome and Iralyn Cainglet	Del Rosario, Julie Anne D. (DChE)	Multiphysics modeling, sensitivity analysis, and optimization of an LCO-C6 lithium polymer battery
64	JESUS FRANCISCO PROF. CHAIR (ENERGY/RAILWAYS) Jesus P. Francisco(+) and Ms. Mariel N. Francisco	Berana, Menandro S. (DME)	Waste Heat Recovery and Energy Efficiency for Small and Medium Power Users
65	JOSE EDGAR MANRIQUE PROF. CHAIR IN INDUSTRIAL ENGINEERING Mr. Jose Edgar Manrique	Soriano, Virginia J. (IEORD)	Exploring Opportunities and Strategies for University Facilities Management
66	MARITHE GIRBAUD PROF. CHAIR JVS Worldwide	Rosete, Maricar M. (DMMME)	Improved film morphology after cold-bath quenching of electrophoretically deposited $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ with LiCl as a supporting electrolyte
67	LEVY V. ESPIRITU PROF. CHAIR IN CIVIL ENGINEERING Levyrox Corporation	Diola, Ma. Brida Lea D. (ICE)	Multi-criteria Evaluation of Suitable Locations for Temporary Disaster Waste Storage: The Case of Cavite, Philippines
68	LEOPOLDO V. ABIS PROF. CHAIR Ms. Lilia Abis and Friends	Reyes, Joseph Gerard T. (DME)	Energy audit on lighting and air-conditioning for saving energy of laboratories by simulations in DIALux and eQUEST
69	M.E. SICAT PROF. CHAIR M.E. Sicat Construction, Inc.	Espiritu, Richard DV. (DMMME)	3D-printed PDMS-based membranes for CO2 separation application
70	DR. MARIANO P. RAMIRO PROF. CHAIR FOR MATERIALS ENGINEERING Atty. Ma. Elena C. Ramiro	Dela Pena, Eden May B. (DMMME)	Effect of Additives on Choline-Chloride Based Deep Eutectic Solvent
71	ARISTON I. DE LOS REYES ENGINEERING CENTENNIAL PROF. CHAIR MacArthur and Josefina de los Reyes	Sarmiento, Czar Jakiri S. (DGE)	Geomatics and Social Science Research in Smart Cities
72	MACARTHUR AND JOSEFINA DE LOS REYES ENGINEERING CENTENNIAL PROF. CHAIR IN ELECTRICAL ENGINEERING MacArthur and Josefina de los Reyes	Alvarez, Anastacia (EEEE)	Power and Area Oriented Implementations of Lightweight Cryptographic Algorithms for Wireless Sensor Networks
73	DOMINADOR ILIO ENGG CENTENNIAL PROF. CHAIR MacArthur and Josefina de los Reyes	Tamayao-Kieke, Mili-Ann M. (IEORD)	A Book Overview - LCA Cases of Product Systems in the Philippines During the COVID-19 Pandemic
74	MERALCO PROF. CHAIR Meralco	Pedrasa, Michael Angelo (EEEE)	Deadline-Based Electric Vehicle Charging Control Algorithm to Alleviate Congestion in a Low Voltage Network
75	MAYNILAD PROF. CHAIR (2) Maynilad Water Services, Inc.	Yap, Kristian July, R. (DChE)	Effect of Operating Temperature and Electrolyte Composition on Anion Exchange Membrane (AEM) Water Electrolyzer Performance: A Meta-Analysis
76	MAYNILAD PROF. CHAIR (3) Maynilad Water Services, Inc.	Tamondong, Ayin (DGE)	A Coupled Watershed-Ocean Model To Simulate Sediment Transport in the Coastal Zone of a Small Tropical Island in the Philippines
77	MENELEO G. CARLOS SR. EE CENTENNIAL PROF. CHAIR Mr. Meneleo Carlos, Jr. and Ms. Filomena Reyes Carlos	Austria, Isabel (EEEE)	Scalable and Sustainable Community Networks for Inclusive Smart Cities
78	MANUEL M. LOPEZ UP CENTENNIAL PROF. CHAIR Meralco Millenium Foundation, Inc.	Rosales, Marc (EEEE)	Properties and Design of CMOS Thyristor Delay Elements
79	FELIX M. GONZALEZ PROF CHAIR IN MATERIALS ENGINEERING Mr. Michael M. Gonzalez	Vasquez, Magdalena R. Jr. (DMMME)	Fabrication and characterization of visible light-active plasma-reduced Ag-TiO ₂ Janus nanoparticles for plasmonic photocatalysis

80	EDISON COSETENG PROF. CHAIR IN ELECTRICAL ENGINEERING MMI Holdings, Inc.	Lucas, Crisron Rudolf (EEEI)	Decompression of Bluetooth-transmitted Audio using Super Resolution for Low-Latency Applications
81	ROBERT CHENG - URATEX PROF. CHAIR (1) Multiflex RNC Corporation (Uratex)	Perez, Jem Valerie D. (DChE)	In Situ Polymerization of Polypyrrole and Polyaniline on the Surface of Magnetic Molybdenum Trioxide Nanoparticles: Implications for Water Treatment
82	ROBERT CHENG - URATEX PROF. CHAIR (2) Multiflex RNC Corporation (Uratex)	Balela, Mary Donnabelle L. (DMMME)	Electrochemical Fabrication of Porous Interconnected Copper Foam
83	ROBERT CHENG - URATEX PROF. CHAIR (3) Multiflex RNC Corporation (Uratex)	Sorolla, Maurice II (DChE)	Spin and Orbital Effects on Asymmetric Exchange Interaction in Polar Magnets
84	NIPPON AND TELEPHONE TELEGRAPH PROF. CHAIR NTT	Co, Paul Jason (EEEI)	Capacity-Based Huffman-Coded OFDM with Index Modulation
85	THE ABBA'S ORCHARD PROF. CHAIR IN MECHANICAL ENGINEERING Orchards of the Abba Corporation	Danao, Louis Angelo (DME)	Mapping of Suitable Sites for Concentrated Solar Power Plants in the Philippines Using Geographic Information System and Analytic Hierarchy Process
86	PETROENERGY RESOURCES PROF CHAIR IN ENERGY ENGINEERING PetroEnergy Resources Corporation	Orillaza, Jordan Rel (EEEI)	Transmission development projects assessment using simulated market prices
87	DEAN MARINO MENA PROF. CHAIR IN ENGINEERING PHINMA Foundation	Aberilla, Jhud Mikhail O. (DChE)	Environmental Sustainability of Banana Waste Utilization Into Food Packaging & Liquid Fertilizer
88	EDGARDO S. PACHECO PROF. CHAIR PHINMA Foundation	Gonzales, Arthur III, A. (DChE)	In-silico Screening and Identification of Phytochemicals from Centella asiatica as Potential Inhibitors of Sodium-Glucose Co-Transporter 2 for Treating Diabetes
89	PHINMA FOUNDATION PROF. CHAIR PHINMA Foundation	Mercado, Candy C. (DMMME)	A micro-composite prodrug and its theranostic potential
90	FILEMON RODRIGUEZ PROF. CHAIR IN COMPUTER SCIENCE PHINMA Foundation	Festin, Susan (DCS)	Holochain as Applied to Distributed Ledger Technologies
91	FILADELFO PANLILIO PROF. CHAIR PHINMA Foundation	Solamo, Rowena (DCS)	AniMeals:Using Virtual Pets to Promote Healthy Eating
92	CESAR A. BUENAVENTURA PROF. CHAIR Pilipinas Shell Petroleum Corporation	Ocon, Joey, D. (DChE)	Techno-economic & Financial Analyses of Hybrid Renewable Energy System Microgrids in 634 Philippines Off-grid Islands: Policy Implications on Public Subsidies & Private Investments
93	CESAR A. BUENAVENTURA UP CENTENNIAL MAYNILAD PROF. CHAIR Pilipinas Shell Petroleum Corporation	Bongolan, Vena Pearl (DCS)	School Reopening Simulations with COVID-19 Agent-based Model for the Philippine Regions
94	OSCAR M. LOPEZ PROF. CHAIR IN ENVIRONMENTAL ENGINEERING Pilipinas Shell Petroleum Corporation	Rollon, Analiza, P. (DChE)	Prevalence of Phage Infective to Escherichia Coli O157:H7...
95	PLDT-SMART PROF. CHAIR PLDT-Smart Foundation, Inc.	de Guzman, Jaybie A. (EEEI)	Spatial Privacy Leakage in 3D Mixed Reality Data
96	MANTARING-GERVASIO PROF. CHAIR Mr. Rafael Nestor and Ms. Rizalina Gervasio-Mantaring	De Leon, Maria Theresa (EEEI)	A CMOS Power Management Unit with Undervoltage Lockout Circuit as Startup for Piezoelectric Energy Harvesting Applications
97	ATTY. RAUL C. VILLANUEVA PROF. CHAIR Philsaga Mining Corporation	Buño, Kelvin (DCS)	Solving 3-SAT in Distributed P Systems with String Objects
98	FORTUNATO T. DE LA PEÑA PROF. CHAIR FOR PRODUCTIVITY ENGINEERING Mr. Renato M. Tanseco	Martinez, Iris Ann G. (IEORD)	Improving Productivity of Natural Systems via the Bottleneck Analysis and Rate Improvement Performed in Manufacturing Systems
99	ANTONIO & LETICIA R. BELLO PROF. CHAIR IN IE Mr. Renato R. Bello	Pacia, Adeline A. (IEORD)	The Digital Transformation of the UP Diliman - Office of the Vice Chancellor
100	CHANCELLOR ERNESTO G. TABUJARA PROF. CHAIR Mr. Ricardo Tabujara III and Mr. Victor N. Villagracia	Encarnacion, Job Immanuel B. (DME)	Economic feasibility of high tip-speed ratio blades operating in less energetic currents

101	RONALDO S. ISON PROF. CHAIR IN STRUCTURAL ENGINEERING AND DISASTER RISK MANAGEMENT Mr. Ronaldo S. Ison	Aquino, Diocel Harold M. (ICE)	A Framework for the Benefit-Cost Analysis of Retrofitting School Buildings in Metro Manila
102	QUINTIN & NORMA CALDERON PROF. CHAIR IN CIVIL ENGINEERING Ms. Rosario S. Calderon	Vergel, Karl B. N. (ICE)	Estimation of Carbon Dioxide and Local Emissions of Road and Rail Transportation in the Philippines
103	SAN ROQUE POWER CORPORATION PROF. CHAIR IN COMPUTER SCIENCE San Roque Power Corporation	Tan, Wilson (DCS)	Improving Loop Counting Algorithms for Public Transportation System Service Level Monitoring Through the Incorporation of a Tolerance Mechanism
104	JOSE P. SEGOVIA PROF. CHAIR Segovia & Co.	Odulio, Carl Michael (EEEI)	Two-Stage Resonant LED Driver with Automatic with Automatic Calibration for Constant Current Operation Calibration for Constant Current Operation
105	FEDERICO E. PUNO PROF. CHAIR A Semirara Mining and Power Corp.	Villalba, Imee Bren O. (ICE)	Evaluation of Storm Surge Behavior Due to Different Typhoon Tracks & Windspeeds Along the Coast of Dagupan City, Philippines
106	FEDERICO E. PUNO PROF. CHAIR B Semirara Mining and Power Corp.	Macuha, Richmark N. (ICE)	Ecological Impact Assessment of Run-of-River Hydropower Plant: Hydrologic and Hydraulic Modeling Components
107	SEMIRARA MINING CORPORATION PROF. CHAIR IN MINING ENGINEERING Semirara Mining and Power Corporation	Buquiz, Jan Lowell P. (DMMME)	Physical Characterization of Locally Sourced Perlite from Camarines Sur, Philippines
108	SEMIRARA MINING CORPORATION PROF. CHAIR IN COMPUTER SCIENCE Semirara Mining and Power Corporation	Adorna, Henry (DCS)	BRUCC: Properties of SN P system and its Configuration Graph
109	SEMIRARA MINING CORPORATION PROF. CHAIR IN ENGINEERING Semirara Mining and Power Corporation	De Leon, Mark Jeffrey D. (DMMME)	Probing the structural features of a plasma-treated chitosan-acrylic acid hydrogel
110	SR METALS PROF. CHAIR SR Metals, Inc.	Maniaul, Joy Marisol F. (DMMME)	Evaluating the Kinetics of the Cementation of Gold using Zinc, Aluminum, and Iron in Chloride Solution
111	DON BENITO YAO METE CENTENNIAL PROF. CHAIR IN METE SteelAsia Foundation	Amorsolo, Alberto V., Jr (DMMME)	X-ray Radiation Absorption Properties of Minerals in Philippine Metallic Ores
112	STEPHEN D. SY PROFESSORIAL CHAIR Focus Global Inc.	Lorenzo, Lowell L. (IEORD)	A Modified Crop Planning Decision Support Model for Smallholder Farmers
113	TEAM ENERGY PROF. CHAIR IN ENERGY ENGINEERING Team Energy Foundation	Tio, Adonis Emmanuel dela Cruz (EEEI)	Finding congestion modes of future grids with diverse power exchanges
114	UP ALUMNI ENGINEERS PROF. CHAIR UP Alumni Engineers, Inc.	Zuniga, Philip Christian (DCS)	Formalising Interoperability in Information Exchanges
115	UPAE ENGINEERING CENTENNIAL PROF. CHAIR UP Alumni Engineers, Inc.	Caro, Jaime (DCS)	Immersive Technology Applications in Healthcare: Application Design of a Virtual Reality Therapy Game for Patients with Cerebral Palsy
116	UPAE CRISOSTOMO A. ORTIGAS PROF. CHAIR UP Alumni Engineers, Inc.	Ramos, Manuel Jr. (EEEI)	Comparative Analysis of Fuzzy-Neural Network Implementations on an Autonomous Electric Vehicle
117	UPAE VIDAL A. TAN PROF. CHAIR UP Alumni Engineers, Inc.	Valdez, Adrian Roy (DCS)	Optimal Budget Allocation for a Discrete Lagrangian SEIR Model Using Genetic Algorithm
118	UP KEM GLOBAL - DR. LUZ SALONGA PROF. CHAIR UP KEM Global / Alex Sy Sun Eng	Pilario, Karl Ezra, S. (DChE)	Predicting Drying Curves in Algal Biorefineries using Gaussian Process Autoregressive Models
119	UP ME CLASS 1980 PROF. CHAIR IN MECHANICAL ENGINEERING UP ME Class 1980	Lustro, Julius Rhoan T. (DME)	Homoclinic Bifurcation Edge States and Boundary Crisis in Plane Couette Flow
120	DR. LEONARDO Q. LIONGSON PROF. CHAIR IN HYDE UPERDFI and Victor N. Villagracia	Soriano, Roberto (ICE)	Field Observations to Define the Boundary Conditions and Salinity Structure in a Coastal Sand Dune Aquifer
121	V & L AESQUIVEL PROF. CHAIR IN EE Virgil R. Aesquivel	Sison, Luis (EEEI)	Interactive problem sets for asynchronous remote learning

122	PROF. EMER. DR. MELITON U. ORDILLAS JR. PROF. CHAIR FOR METALLURGICAL ENGINEERING WITCO Construction and Development Corporation	Baladad, Karlo Leandro D. (DMMME)	Feasibility of Using Burnt Acid-Washed Crab Shells for the Recovery of Leached Gold from Electronic Wastes
Category 1 (80,000)			
123	TOMAS PADILLA ABELLO PROF. CHAIR IN MECHANICAL ENGINEERING Tomas Abello Family	Dalisay, Jon Dewitt E. (DME)	Characterization of visco-hyperelastic behavior of soft materials through transient shear testing
124	BENGUET MANAGEMENT CORPORATION PROF. CHAIR Benguet Management Corporation	Sunday, Carlo Angelo A. (IEORD)	A Framework for Solving an Inbound Vehicle Routing Problem Considering a Vehicle Fleet, Multiple Trips, and Scheduled Returns to the Depot
125	ARMENA-ESTUAR PROF. CHAIR Fiorello R. Estuar	Resurreccion, Joanna Z. (IEORD)	Impact Analysis of Post-Covid Consumption Patterns and Trend on Integrated Manufacturing and Service Systems
126	CRISTY R. HERNANDEZ PROF. CHAIR IN ENGINEERING Cristy Hernandez Family	Galeon, Florence A. (DGE)	Vegetation Effect in Urban Land Values
127	HYDRO RESOURCES CONTRACTORS PROF. CHAIR Hydro Resources Contractors Corp.	Bautista, Dominic M. (ICE)	Concept Design of a Research Wave Flume of the ICE Coastal Engineering Laboratory
128	JOSE MA. DIAGO DE CASTRO PROF. CHAIR Family of Jose Ma. De Castro	Raquel, Carlo (DCS)	Exploration Approaches for Hybrid Derivative-free and Gradient-based Multi-objective Reinforcement Learning
129	MARUBENI UP CENTENNIAL PROF. CHAIR Marubeni Philippines Corp.	Sadie, Homer T. (ICE)	Identifying Causes & Effects of delay in Construction Projects in Metro Manila
130	QUEZON POWER PROF. CHAIR Quezon Power Philippines	Villena, Pierre Allan C. (IEORD)	Text Analysis Using Deep Learning Approach to Determine the Type of Complaint Mentioned by Customers in Social Media Posts
131	UPIEAA PROF. CHAIR UP IE Alumni Association, Inc.	Lorenzo, Simon Anthony D. (IEORD)	Test Count Optimization in Pooled Testing Methodologies



Professional Chair Colloquium Synthesis in January 2023

ANNEX 3: LIST OF TEACHING AND RESEARCH AWARDS

AY 2022-2023

	Donor	TRA Recipient	Research Title
1	Beta Epsilon Alumni	Musico, John Kenneth B. (ICE)	Suitability Analysis for Evacuation Centers in Makilala, Cotabato Using Geographic Information System (GIS)
2	DMCI Homes	Nalzaro, Paul Jake B. (DChE)	Bioethanol Production from Rice Straw: A Plant Design
3	DMCI Homes	Clemente, Jhoirene B. (DCS)	Empirical Competitive Analysis for the Online Assignment Problem with ML Predictions
4	DMCI Homes	Guevara, Trishia C. (DGE)	Exploring the Monitoring and Information Systems Used by the Housing and Land Use Department
5	DMCI Homes	Jeremias, Jayson Sime D. (DChE)	Removal of Copper from Metal Plating Wastewater
6	DMCI Homes	Tamargo, Ramuel John I. (DChE)	Modeling the Diffusion and Swelling Kinetics of Cellulose-based Hydrogels
7	DMCI Homes	Medina, Jommer (DGE)	Spatiotemporal Analysis of Land Cover Changes in Manila Bay Watershed in 2001-2020 Using MODIS Data
8	DMCI Homes	Mabaquiao, Luis Carlos S. (DGE)	Vegetation Density Change Assessment in Sorsogon After the 2022 Eruption of Mt. Bulusan Using Sentinel 2
9	DMCI Homes	Pacer, Jihan S. (ICE)	Evaluation of Turbulence Models in Predicting Wind Loads on Ground-Mounted Solar Panels
10	MERALCO	Vergara, Karl Adrian P. (DGE)	Spatial Data Integration and Analysis of Sustainable Development Goals (SDGs) in the Philippines
11	NHRC	Alcantara, Matthew Travis M. (ICE)	Nonlinear Finite Element Implementation of a J2D Plasticity model based on the Modified Ramberg-Osgood Power Law for Strain Softening Soils
12	Philex Mining Corporation	Cabanlig, Francesca Valerie T. (DMMME)	A Study on the Use of a Carrageenan Solution for Soil Stabilization and Dust Control
13	PNOC	Elazegui, Erica Erin E. (DGE)	Mobility Tracking using Geospatial Tools and Applications
14	UPERDFI	Ang Dy Pay, Giorgiana (IEORD)	A Multiple Linear Regression Approach on Location Attributes and Prices of Metro Manila Condominiums
15	UPERDFI	Regonia, Paul Rossener (DCS)	Modeling Heterogeneous Brain Dynamics and Melancholia Using Energy Landscape Analysis
16	UPERDFI	Arranz Christian G. (DMMME)	The Future of Automation and Related Emerging Technologies in the Large-Scale Philippine Mining Industry: A Scenario-Driven Foresight Analysis
17	UPERDFI	Agar, Joshua C. (ICE)	Component-Based Severe Wind Vulnerability Analysis of Wooden Structures in the Philippines
18	UPERDFI	Amolato, Rochie D. (ICE)	Optimal Tank Sizing of a Rainwater Harvesting System in Public Transportation buildings for Urban Flood Mitigation
19	UPERDFI	Luistro, Franco Danilo C. (DMMME)	A Preliminary Study on the Flotation of Loaded Fine Activated Carbon from Cyanidation tailings using Anionic Collectors
20	UPERDFI	Montealegre, Charlimagne, M. (DChE)	Dissolution Kinetics of Calcium Oxalate Monohydrate (COM) In the Presence of Blumea Balsamifera Extract

21	UPERDFI	Macugay, Joshua Kae B. (DMMME)	Investigating Effects of Fabrication Parameters on the Hydrophilicity and Water Absorbability of Polycaprolactone Nanofibrous Membrane Filled with Alginate-Chitosan Particles
22	UPERDFI	Oyales, Mitch-Irene Kate G. (DMMME)	Materials Selection and Design of Moisture-Trapping Polymer Blend Film
23	UPERDFI	Ordanel, Ivy (DCS)	An Empirical Comparison of Three Approximation Algorithms for the Poset Cover Problem
24	UPERDFI	Tejada, Regina A. (IEORD)	Warehouse Improvement and Facility Design of a FMCG Distributor
25	UPERDFI	Junio, Jessica M. (ICE)	Evaluation of Mechanical Properties of Loadbearing Concrete Hollow Blocks Using Gold Mine Tailing as Partial Substitute to Sand
26	UPERDFI	Pechardo, Jason (DMMME)	Synthesis and design of bioactive polymer thin
27	UPERDFI	Regidor, Hanna Czarise E. (DMMME)	Electrowinning of Copper from Printed Circuit Board (PCB) Manufacturing Waste Acid Solution
28	UPERDFI	Barros, Ammiel Mac A. (ICE)	On Implementation of Digital Twins in the Structural Health Monitoring Practice of the Philippines
29	Manuel and Leticia Bulaong (CE) Donor: Manuel R. Bulaong, Jr.	Plamenco, Dean Ashton D. (ICE)	A Landscape Analysis of Sustainable, Green and Circular Housing Solutions in the Philippines
30	Manuel R, Bulaong, Jr (CE)	Colegio, Karlo Daniel Q. (ICE)	Displacement-Based Shape Optimization of Non-Prismatic Steel Beams using 2-Dimensional Isogeometric Analysis
31	Ernesto and Evelyn Cua (CS) Donor: Jennifer Lynn Cua	Juayong, Richelle Ann B. (DCS)	Gamified upper-limb rehabilitation program for elderly participants using a real-time motion tracking system
32	Canon & Mimilyn Carolino (ME)	Garcia, John Carlo S. (DME)	Refrigerant Circuitry Optimization Using Genetic Programming



Research Grants MOA Signing with Universal Robina Corporation

ANNEX 4: LIST OF SCHOLARSHIPS AND STUDY GRANTS

AY 2022-2023

	Student	Degree Program
Alvarez Foundation		
1	Espinosa, Han	BS ECE
2	Golpe, Rodney	BS ECE
3	Marcelino, Kate Alyssa	BS GE
4	Zablan, Cristan Dave	BS GE
Analog Devices, Inc.		
5	Alegre, Raine Kayla	BS ECE
6	Bartolo, Brian Lenmark	BS CoE
7	Bernante, Aaron John	BS ECE
8	Camarillo Jr., Christopher	BS ECE
9	De Mesa, Mico Irvin	BS ECE
10	Limlingan, Gabriel	BS ECE
11	Marturillas, John Rey	BS ECE
12	Molines, Jeremy	BS ECE
13	Obar, Trixi Emmanuelle	BS ECE
14	Rajagopalan, Ramona	BS ECE
Apolonio and Lorna Yson		
15	Pagcu, Michael Vincent	BS ME
Carmen and Manuel Magno		
16	Cantimbunan, Jeight	BS CoE
Denso Ten Philippines Corporation		
17	Estabillo, Sanroe	BS ECE
18	Santos, Ryan Christopher	BS ME
Edwin Coseteng		
19	Franco, Zyrah Angela	BS MetE
20	San Juan, Reila Mae	BS ME
Eriberta Rocha Granada		
21	Ibia, Jose Manuel	BS ChE
Filminera Resources Corporation		
22	Abraham, Zyre Jasper, Lee	BS EM

23	Costales, Jamaimah Ruvie	BS EM
24	Miguel, Keith Jeremy, Ballad	BS EM
Gokongwei Brothers Foundation, Inc. (GBF)		
25	Bernardino, John Renell	BS CE
26	Rempillo, Rowill Christian R.	BS ME
GT Foundation, Inc.		
27	Abacahan, Glenn Mark	BS GE
28	Daulo, Hans Gabriel	BS EcE
29	Dolon, Gian Carlo	BS CoE
30	Gabuat, Princess Meryl Joy	BS IE
31	Gala, Ma. Julie Anne L.	BS EE
32	Gentiles, Demi Julianna	BS GE
33	Jamisola, Raia	BS GE
34	Mendova, Andree John	BS EE
35	Ong, Rainer Christian	BS CS
36	Orbina, Kyla	BS GE
37	Pagtulingan, Freddie Jr.	BS CoE
38	Reblora, Eliz Anne	BS MatE
39	Reyes, James Marco M.	BS CoE
40	Tanchico, Thomy Andrei	BS CE
41	Urfano, Ellris Kristian Nuel L.	BS EE
42	Villarias, Jenny Rose	BS GE
Huawei Technologies Philippines		
43	Bayani, Martina Meg	BS CoE
44	Espinosa, Han	BS ECE
45	Mondia, Dominic John C.	BS EE
46	Wong, Jansen Roel	BS CoE
Kayan Chan		
47	Cacas, Hannah Belle	BS IE
48	Talledo, Charles Russell	BS IE
Megaworld		

49	Abanilla, Ma. Lordes Angela	BS CE
50	Agpoon, Mike Ferdinand	BS CE
51	Badilla, Martson John	BS CE
52	Baldivicio, Lovely Joyce	BS CE
53	Bautista, Mary Angeline	BS CE
54	Berin, Jean Francois Thomas	BS ECE
55	Bodomo, Ron Brian	BS ECE
56	Buenaventura, Nathaniel	BS CE
57	Cabigayan, Rizalyn	BS CE
58	Cacao, Jessa	BS EE
59	Capua, Celine Joy	BS ECE
60	Carag, Samantha	BS CE
61	Cardona, Jake Ceasar	BS CE
62	Corral, Steve Ivan	BS CE
63	Cruz, John Harold	BS CE
64	Dalida, Lorraine Faye	BS CE
65	Dalogdog, Marvi Leu	BS CE
66	De La Torre, Mark Daniel	BS CE
67	De Leon, Allysa	BS CE
68	De Leon, Christelle Mae	BS CE
69	Del Mundo, Nyan Denice	BS CE
70	Encarnacion, Cedric	BS ECE
71	Escano, Gemmuel	BS CE
72	Estabillo, Sanroe	BS ECE
73	Fajardo, Kyla Camille	BS CE
74	Flores, Charlene	BS CoE
75	Guico, Pierce Jerico	BS CE
76	Hebron, Elizar Jr.	BS CE
77	Janaban, Bianrosel Thomas	BS EE
78	Lagaña, Jan Rhey	BS EE
79	Laquip, Sophia Margot	BS CE
80	Larga, Lester Adrian	BS ECE
81	Lelis, Lance Christopher	BS CE
82	Manalo, Dimple Mae	BS ECE
83	Marcuap, Cherry Red	BS CE
84	Melanio, Sean Riley	BS CE

85	Morasa, Danneri Blu	BS CE
86	Nuñez, Sarah Micaela	BS CE
87	Oria, Cedric Allen	BS EE
88	Pangilinan, Myrene	BS CE
89	Panlilio, Aerren Azhlei	BS CE
90	Pantaleon, Mariz Joyce	BS CE
91	Pasamonte, Martin	
92	Recto, Jezler	BS ECE
93	Reguindin, Chari Ayanna	BS CE
94	Ripalda, James	BS CE
95	Rivera, Vincent James	BS CE
96	Rollan, King AJ Ian Caesar	BS CE
97	Santos, Ira Nicole	
98	Santos, Princess Keith	BS CE
99	Sursigis, Zihandres	BS ECE
100	Talavera, Allyza	BS CE
101	Talosis, Kiel Sam	BS CE
102	Tan, Bjornc Denise	BS CE
103	Tiamzon, Roniño John	BS CE
104	Uy, Marion Joseph	BS ECE
105	Vargas, Alethea Erika	BS CE
106	Viña, Toney Juan	BS ECE
107	Vinuya, Frankee	
108	Zafe, Patricia Nicole	BS CE

Metro Pacific Tollways Corporation

109	Isaac, Juan Paolo	BS Ece
110	Macalino, Mark Jester	BS MatE
111	Perera, Kushmi Himasha	BS CE
112	Tabanera, Ryan	BS MatE
113	Tatoy, Camille Marie	BS Ece

One Meralco Foundation

114	Magbanua, Lynille	BS EE
115	Miguel, Crizhalyn Weng	BS EE
116	Sotto, Angela Kaye	BS EE

PayEngg Forward (Michael Gonzalez)

117	Aquino, Christian James Klein, Marquez	BS CE
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118	Fajardo, Kyla Camille	BS CE
119	Morasa, Danneri Blu N.	BS CE
120	Trinidad, Akira	BS CE
PGATech		
121	Ripalda, James	BS CE
Philippine Gold Processing and Refining Corporation		
122	Troyo, Lloyd Emmanuel, Hoganas	BS ME
Philsaga Mining Corporation		
123	Ramirez, Paolo Aiman	BS MetE
124	Rastrullo, Jayvee	BS MetE
125	Reyes, Joanna	BS MetE
126	Villaruel, John Chris	BS EM
RL Royal Prime		
127	Villahermosa, Ma Kyla	BS EM
Robert Cheng (URATEX)		
128	Angeles, Paul Dominic	BS ChE
129	Antido, Margie Lou	BS CE
130	Salar, Marc Andrei	BS EE

131	Sequito, Nicole Kate	BS MetE
132	Ularde, Jerlyn Yofelle	BS ME
UPAA British Columbia		
133	Conquilla, Jerico	BS GE
134	Fiesta, Honey Val	BS EE
135	Flores, Charlene	BS CoE
136	Kusain, Abdullah Galmak	BS GE
137	Marco, Josyl	BS GE
138	Santos, Mikaela	BS GE
UP Alumni in Minnesota		
139	de Leon, Juan Carlos	BS ME
William Cua		
140	Gador, John Edrick	BS CoE
141	Moneda, Blooming Dan	BS CS
Yin Yong Lao		
142	Cacal, Vina Cielo Clarisse, Singh	BS ChE
143	Quintano, Charlie	BS ChE



UP College of Engineering Recognition Rites 2022

ANNEX 5: LIST OF THESIS SUPPORT GRANTS

AY 2022-2023

	Student	Degree Program
Abelardo Basilio		
1	Anthea Marie U. Alcantara	BS CE
2	Curt Jeremy Bernardo and Maxine Aleia G. Jovellanos	BS CE
3	John Renell B. Bernardino	BS CE
4	Justine Matthieu R. Isidro	BS CE
Atty. Ma Elena Ramiro		
5	Carlo Miras	BS CoE
6	Alarcon Ace Belen	BS CoE
7	Thomas Anthony Rigor	BS CoE
8	Andre Victor Suarez	BS MetE
9	John Carlo Caparas	BS MatE
10	Xavier John Esperanza	BS MetE
Cecilia Aguilar		
11	Jessica Lazam	BS ChE
12	Reynalyn Tabarangao	BS ChE
Cenon M. Carolino		
13	Sean Nehemiah Pantino	BS MatE
14	Toby Bayad	BS MatE
15	Yusaira Maon	BS MetE
Cesar Romero		
16	Dennis Salvador Ignacio	BS CoE
17	Joanna Marie Mijares	BS MetE
18	Raymond Mathew Piamonte	BS ME
Dyson Foundation		
19	Ainalyn Nerves	BS GE
20	Jasper Sean Talao	BS MatE
21	Jenny Rose Cristobal	BS ECE
22	Katrina See	BS MatE

Francis and Leah Felizardo		
23	Genevieve Ivy Lucas	BS EM
24	Kinn Villaluna	BS EM
FrontLearners		
25	John Rikk Mendoza	BS ECE
26	Divine Grace Seroy	BS CoE
27	Enrique Bellen III	BS CoE
28	Markus Elija Thomas Lindo	BS CoE
J Amado Araneta Foundation		
29	Reyjohn Christian C. Naga	BS CE
30	Deniz Apostol	BS GE
31	John Chris Villaruel	BS EM
Jennifer Cua		
32	Khristine Joie Recto	BS ECE
Joe and Fae Albano		
33	Adrian Cahliil Eiz Togonon	BS CoE
34	Neil Josiah Josol	BS EM
35	Ralph Miguel Santos	BS MatE
36	Rodalyn Gasid	BS EE
Josephine Santiago Bond		
37	Robert Allan Pesa	BS ECE
Jude Salac		
38	Charlize Yvette Cantara	BS GE
39	Daryl Ann Cabuyadao	BS GE
40	John Renan Ignacio	BS GE
41	Rapheal Allen Jariol	BS CoE
L R Tiqui Construction		
42	Aisha Gonzales	BS CE
43	Ynna Mariz Rabago	BS CE

44	Fajardo, Kyla Camille S. Morasa, Danneri Blu N.	BS CE
Lilbeth and George Aristorenas		
45	Darz Manuel Boiser	BS ECE
46	Theolornie Hila	BS EM
MRBII Construction		
47	Ira James T. Chung	BS CE
48	Jose Angelo Cabang	BS CE
49	Lorrayne Faye M. Dalida and Allyza L. Talavera	BS CE
50	Ma. Chelsea Beatrice C. Cruz Joanna Angela M. Lee	BS CE
51	Renchel Bonto	BS CE
52	Trisha May E. Andig Christopher James Siete	BS CE
Leocadio and Jocelyn Ostrea		
53	Ginell Elyza Buenavista	BS GE
54	Kim Elijah Aguilan	BS GE
Percival Tejano Jr.		
55	Samantha Ruth Aquino	BS MatE
Philippine Gold Processing and Refining Corporation		
56	Lloyd Emmanuel Troyo	BS ME
Rafael C. Discipulo		
57	Michael Joseph Gomez	BS GE
Raul Ignacio		
58	Gamaliel Paul Olano	BS ECE
59	John Joshua Garcia	BS MatE
Ricardo Rodriguez		
60	Jan Francois Severo	BS MatE

UPAAGLA		
61	Rica Mae Sibulo	BS MatE
62	Adrian Jyronne F. Luz	BS CE
63	Albert Gabriel P. Datingaling	BS CE
64	Alexandra Millete M. Mejia	BS CE
65	Christian James Klein M. Aquino	BS CE
66	Elizar Jr. Hebron and Lea Andrea Tayo	BS CE
67	Emilson Ryan Antes & Mellaine Denise De Leon	BS CE
68	Jeanne Danielle M. Go and Grant Aaron King	BS CE
69	Jonas Rhein P. Esguerra	BS CE
70	Justine Alexandra T. Schneck	BS CE
71	Niña Ricci Jae P. Lozano Erika Daphne B. Torres	BS CE
Webfocus Solutions		
72	Aeron Mark Hernando	BS GE
73	Camille Marie Tatoy	BS ECE
74	Chriska Myles Garcia	BS MatE
75	Denise Ysabel Domagas	BS MatE
76	Dionella Jitka Quinagoran	BS MatE
77	Ethan Robert Tantoco	BS MatE
78	Faith Laurence Sarmiento	BS MatE
79	Gabriel Francis Almario	BS ECE
80	Matt Eigyson Onia	BS GE
Yin Yong Lao		
81	Dione Bernn Yapoyco	BS MatE
82	Nicolo Romi Mondez	BS MatE

ANNEX 6: FACULTY, STAFF AND STUDENT AWARDS

2022

Faculty, Staff and REPS Awards (2022)		
	Award	Awardee
1	Outstanding Engineering Instructor	Luis Carlos Mabaquiao
2	Limcaoco Young Instructor Award For Teaching Excellence	Karl Adrian Vergara
3	Outstanding Engineering Researcher Award	Ariel C. Blanco
4	Outstanding Engineering Professor Award	Magdaleno B. Vasquez, Jr.
5	Administrative Award	Leslie B. Crisostomo
6	Administrative Award	Ricardo L. Moralejo
7	Administrative Award	Cheryl Lynn F. Bustillos
8	Research Extension And Professional Staff (Reps) Award	Maria Rea F. Bunuan
Student Awards (AY 2021-2022)		
	Award	Awardee
1	Ramon Khu Award for the Class Valedictorian	Josei S. Tolentino, BS ECE, scl
2	Dominador Ilio Award for Most Outstanding All-Around Engineering Student	Vinz Keenan K. Go, BS ME, scl
3	Professor Teodorico Festin Award for Excellence in Chemical Engineering	John D. Cagape, BS ChE, scl
4	Professor Emeritus Evangel Quiwa Award for Excellence in Computer Science	Angela Diwa G. Atienza, BS CS, scl
5	Dr. Luis Pascual Award for Excellence in Industrial Engineering	Karina Eunice S. Cruz, BS IE, scl
6	Vicente T. Paterno Award for Excellence in Mechanical Engineering	Vinz Keenan K. Go, BS ME, scl
7	Joseph Que Sanchez Academic Excellence Award in Computer Engineering	Sean Arthur E. Sombrero, BS CoE, scl
8	Rosita Cua Academic Excellence Award for Best Female in Computer Engineering	Almira Astrid F. Muro, BS CoE, mcl
9	The Jose C. Torres Award for Excellence in Electrical Engineering	Rainer James B. Palmiano, BS EE, scl
10	Quintin K. Calderon Award for Excellence in Civil Engineering	Andrew Aren B. Ong, BS CE, scl
11	Garrick Yao Memorial Award for Service	Alethea Faye F. Cendana, BS ChE, mcl
12	UP Alumni Engineers Presidential Award for Outstanding Leadership	Camille Ann D. Venturina, BS ChE
13	Dr. Rufino C. Lirag Chemical Engineering Award for Leadership and Service	Camille Ann D. Venturina, BS ChE
14	Professor Emeritus Norberto Villa Award for Excellence in Geodetic Engineering	Jarence David D. Casisirano, BS GE, mcl
15	Institute of Materials Engineers of the Philippines Academic Excellence Award in Materials Engineering	Caleb Joshua R. Abrazaldo, BS MatE, scl
16	Society of Metallurgical Engineers of the Philippines Academic Excellence Award in Metallurgical Engineering	John Rebo M. Santos, BS MetE, scl
17	Artemio F. Disini Academic Excellence Award in Mining Engineering	John Aldous T. Mendoza, BS EM, cl
18	UPEEE Alumni Assoc. Award for Academic Excellence in Electronics and Communications Engineering	Josei S. Tolentino, BS ECE, scl

ANNEX 7: DR. FRANCIS CHUA INNOVATION AWARDS

UNDERGRADUATE PROJECT COMPETITION 2022

Design Category		
Award	Winners, Adviser (Dept/Inst)	Project
1st Place – PhP 50,000	Mariz Gabrielle M. Domingo Adviser: Mary Donnabelle Balela (MMM)	Silver nanowire-PVB composite for Reflective Heat Coating
2nd Place – PhP 30,000	John D. Cagape, Kim Andrei R. Danganan, Chrissen Juvileen D. Galang Adviser: Joey Ocon (ChE)	Techno-economics of "Teal" Hydrogen Production via Combined Steam Methane Reforming and Biomass Gasification
Finalist – PhP 10,000	Vincent Stanley Q. So Adviser: Louis Angelo Danao (ME)	Design of a CPM Machine for ACL Rehabilitation Therapy
Finalist – PhP 10,000	Ron Neil Matthew S. Alonzo, Allen Joshua S. Dalangin, John Limuel P. Peradilla Adviser: Alberto De Villa (EEE)	Smart Conversion Kit for Traditional Appliances through Microcontrollers and a Home Automation Platform
Finalist – PhP 10,000	Ana Therese A. Levosada Adviser: Gerald Jo C. Denoga (ME)	Mechanical Seedling Transplanter
Research Category		
Award	Winners, Adviser (Dept/Inst)	Project
1st Place – PhP 50,000	Wynona Raechel M. Magnaye Adviser: Rinlee Butch Cervera, Eduardo Magdaluyo (MMM)	Mask-crete: Fabrication of Concrete with Recycled Medical Masks as Fibre Reinforcement
2nd Place – PhP 30,000	Bill John B. De Vera Adviser: Timothy John Acosta, Karlo Daniel Colegio (CE)	Prediction of Net Wind Pressure Coefficients in Isolated Low-Rise Gable Roof Buildings using Artificial Neural Networks
Finalist – PhP 10,000	Renea Isabella M. Espiritu Adviser: Imee Bren Villalba (CE)	Analysis of Flooding in Calasiao Under Typhoon Ketsana (Ondoy) Rainfall Scenario Using Hydrologic and Hydraulic Modeling
Finalist – PhP 10,000	Andrew Aren B. Ong Adviser: Marjorie David, Eric Cruz (CE)	Study of the Effect of the Southwest Monsoon and Typhoon Wind Speed on Storm Surges in Manila Bay
Finalist – PhP 10,000	Jan Kenneth C. Macagba Adviser: Pher Errol Quinay, Karlo Daniel Colegio (CE)	Shape Optimization of Non-Prismatic Beams using Isogeometric Analysis

UP Engineering Research and Development Foundation, Inc.
(A Nonstock, Not-for-profit Organization)

Financial Statements
December 31, 2022 and 2021

and

Independent Auditor's Report



Sycip Gorres Velayo & Co.
6700 Ayala Avenue
1226 Makati City
Philippines
Tel: (632) 8891 0307
Fax: (632) 8819 0872
sgv.com.ph

INDEPENDENT AUDITOR'S REPORT

The Board of Trustees
UP Engineering Research and Development Foundation, Inc.

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of UP Engineering Research and Development Foundation, Inc. (the Foundation), which comprise the statements of assets, liabilities and fund balances as at December 31, 2022 and 2021, statements of revenues and expenses, statements of changes in fund balances and statements of cash flows for the years then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Foundation as at December 31, 2022 and 2021, and its financial performance and its cash flows for the years then ended in accordance with Philippine Financial Reporting Standards for Small and Medium-sized Entities (PFRS for SMEs).

Basis for Opinion

We conducted our audits in accordance with Philippine Standards on Auditing (PSAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Foundation in accordance with the Code of Ethics for Professional Accountants in the Philippines (Code of Ethics) together with the ethical requirements that are relevant to our audit of the financial statements in the Philippines, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with PFRS for SMEs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Foundation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Foundation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Foundation's financial reporting process.



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Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with PSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with PSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Foundation's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Foundation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Foundation to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



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Report on the Supplementary Information Required Under Revenue Regulations No. 34-2020 and No. 15-2010

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information required under Revenue Regulations No. 34-2020 and No. 15-2010 in Note 10 to the financial statements is presented for purposes of filing with the Bureau of Internal Revenue and is not a required part of the basic financial statements. Such information is the responsibility of the management of UP Engineering Research and Development Foundation, Inc. The information has been subjected to the auditing procedures applied in our audit of the basic financial statements. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

SYCIP GORRES VELAYO & CO.

Kristopher S. Catalan
Partner

CPA Certificate No. 109712
Tax Identification No. 233-299-245
BOA/PRC Reg. No. 0001, August 25, 2021, valid until April 15, 2024
SEC Partner Accreditation No. 109712-SEC (Group A)
Valid to cover audit of 2021 to 2025 financial statements of SEC covered institutions
SEC Firm Accreditation No. 0001-SEC (Group A)
Valid to cover audit of 2021 to 2025 financial statements of SEC covered institutions
BIR Accreditation No. 08-001998-109-2020, November 27, 2020, valid until November 26, 2023
PTR No. 9369789, January 3, 2023, Makati City

May 31, 2023



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UP ENGINEERING RESEARCH AND DEVELOPMENT FOUNDATION, INC.
(A Nonstock, Not-for-profit Organization)

STATEMENTS OF ASSETS, LIABILITIES AND FUND BALANCES

	December 31	
	2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents (Note 4)	P36,611,547	P28,366,230
Receivables (Note 5)	4,597,888	9,639,986
Other current assets	248,737	240,000
Total Current Assets	41,458,172	38,246,216
Noncurrent Assets		
Investments (Note 6)	279,109,209	288,403,327
Property and equipment (Note 7)	14,248	24,520
Total Noncurrent Assets	279,123,457	288,427,847
TOTAL ASSETS	P320,581,629	P326,674,063
LIABILITIES AND FUND BALANCES		
Current Liabilities		
Accounts payable and other current liabilities (Note 8)	P264,985	P2,583,629
Fund Balances (Note 9)		
General funds	50,014,521	60,166,259
Endowed funds	255,744,975	250,462,396
Special funds	14,557,148	13,461,779
Total Fund Balances	320,316,644	324,090,434
TOTAL LIABILITIES AND FUND BALANCES	P320,581,629	P326,674,063

See accompanying Notes to Financial Statements



UP ENGINEERING RESEARCH AND DEVELOPMENT FOUNDATION, INC.
(A Nonstock, Not-for-profit Organization)

STATEMENTS OF REVENUE AND EXPENSES
YEARS ENDED DECEMBER 31, 2022 AND 2021

	2022				2021			
	General Funds	Endowed Funds	Special Funds	Total	General Funds	Endowed Funds	Special Funds	Total
REVENUE								
Donations	P1,750,768	P3,080,907	P38,695,402	P43,527,077	P1,247,850	P-	P29,233,972	P30,481,822
EXPENSES								
College of Engineering (COE) - modernization cost	-	-	21,748,159	21,748,159	-	-	4,285,178	4,285,178
Professional chairs	-	8,040,000	7,620,000	15,660,000	-	480,000	15,300,000	15,780,000
Scholarship grants and student awards	-	3,192,000	5,320,083	8,512,083	-	-	5,648,913	5,648,913
Bad debts (Note 5)	5,004,368	-	-	5,004,368	-	-	-	-
Project costs	-	-	4,870,591	4,870,591	-	-	-	-
Teaching and research grants	-	1,170,000	420,000	1,590,000	-	-	1,800,000	1,800,000
Salaries and benefits	1,336,733	-	-	1,336,733	1,083,905	-	561,182	1,645,087
Representation and travel	1,312	258,367	189,223	448,902	95,831	-	27,540	123,371
Faculty support	-	300,000	-	300,000	-	-	395,000	395,000
COE - staff support	-	135,000	-	135,000	-	-	-	-
Maintenance and operating	-	6,200	49,000	55,200	468,122	-	549,340	1,017,462
Depreciation (Note 7)	10,272	-	-	10,272	-	-	-	-
COE - research and development	-	-	-	-	-	-	270,363	270,363
Miscellaneous	639,922	5,000	2,120,073	2,764,995	-	-	-	-
	6,992,607	13,106,567	42,337,129	62,436,303	1,647,858	480,000	28,837,516	30,965,374
OTHER INCOME								
Interest income (Notes 4 and 6)	5,656,336	-	-	5,656,336	7,743,703	-	-	7,743,703
Foreign exchange gain - net	683,815	-	-	683,815	18,364	-	-	18,364
Dividend income (Note 6)	723,567	-	-	723,567	392,097	-	-	392,097
Miscellaneous	1,842,939	-	-	1,842,939	91,1698	-	-	91,168
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENSES BEFORE FINAL TAX	3,664,818	(9,255,660)	(4,411,727)	(10,002,569)	7,845,325	(480,000)	396,456	7,761,780
PROVISION FOR INCOME TAX - Final	(377,103)	-	-	(377,103)	(501,798)	-	-	(501,798)
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENSES	3,287,715	(9,255,660)	(4,411,727)	(10,379,672)	7,343,527	(480,000)	396,456	7,259,983
OTHER COMPREHENSIVE INCOME (LOSS)								
<i>To be reclassified to profit or loss in subsequent periods:</i>								
Unrealized changes in fair value of investments (Note 6)	6,605,882	-	-	6,605,882	(2,275,534)	-	-	(2,275,534)
TOTAL COMPREHENSIVE INCOME (LOSS)	P9,893,597	(P9,255,660)	(P4,411,727)	(P3,773,790)	P5,067,993	(P480,000)	P396,456	P4,984,448

See accompanying Notes to Financial Statements



UP ENGINEERING RESEARCH AND DEVELOPMENT FOUNDATION, INC.

*(A Nonstock, Not-for-profit Organization)*STATEMENTS OF CHANGES IN FUND BALANCES
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	General Funds (Note 9)	Endowed Funds (Note 9)	Special Funds (Note 9)	Total
BALANCES AT DECEMBER 31, 2020	₱60,998,066	₱253,758,052	₱4,349,868	₱319,105,986
Excess (deficiency) of revenue over expenses	7,343,526	(480,000)	396,456	7,259,982
Reclassification of fund balances	(5,899,799)	(2,851,656)	8,715,455	—
Other comprehensive loss	(2,275,534)	—	—	(2,275,534)
Total comprehensive income (loss)	(831,807)	(3,295,656)	9,111,911	4,984,448
BALANCES AT DECEMBER 31, 2021	60,166,259	250,462,396	13,461,779	324,090,434
Excess (deficiency) of revenue over expenses	3,287,715	(9,255,660)	(4,411,727)	(10,379,672)
Reclassification of fund balances (Note 9)	(20,045,335)	14,538,239	5,507,096	—
Other comprehensive income	6,605,882	—	—	6,605,882
Total comprehensive income (loss)	(10,151,738)	5,282,579	1,095,369	(3,773,790)
BALANCES AT DECEMBER 31, 2022	₱50,014,521	₱255,744,975	₱14,557,148	₱320,316,644

See accompanying Notes to Financial Statements.

UP ENGINEERING RESEARCH AND DEVELOPMENT FOUNDATION, INC.

(A Nonstock, Not-for-profit Organization)

STATEMENTS OF CASH FLOWS

	Years Ended December 31	
	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Excess (deficiency) of income over expenses before final tax	(₱10,002,569)	₱7,761,780
Adjustments for:		
Interest income (Notes 4 and 6)	(5,656,336)	(7,743,703)
Bad debts (Note 5)	5,004,368	—
Gain on reversal of accounts payable (Note 8)	(2,104,663)	—
Dividend income	(723,567)	(392,097)
Foreign exchange loss (gain)	(683,815)	18,364
Depreciation (Note 7)	10,272	—
Deficiency of revenue over expenses before working capital changes	(14,156,310)	(355,656)
Decrease in receivables	37,730	1,096,507
Increase in other current assets	(8,737)	—
Decrease in accounts payable and other current liabilities	(213,981)	(1,400,121)
Net cash used in operating activities	(14,341,298)	(659,270)
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of debt and equity securities (Note 6)	(16,600,000)	(64,202,225)
Proceeds from disposal and maturity of investments (Note 6)	32,500,000	62,382,225
Interest received (Note 6)	5,279,233	7,241,906
Dividends received (Note 6)	723,567	392,097
Acquisition of property and equipment (Note 7)	—	(24,520)
Net cash from investing activities	21,902,800	5,789,483
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	683,815	(18,364)
NET INCREASE IN CASH AND CASH EQUIVALENTS	8,245,317	5,111,849
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR (Note 4)	28,366,230	23,254,381
CASH AND CASH EQUIVALENTS AT END OF YEAR (Note 4)	₱36,611,547	₱28,366,230

See accompanying Notes to Financial Statements.



1. Corporate Information and Objectives, and Authorization for Issuance of the Financial Statements

Corporate Information and Objectives

The UP Engineering Research and Development Foundation, Inc. (the "Foundation") was incorporated in the Philippines and is registered with the Philippine Securities and Exchange Commission (SEC) on August 3, 1972 as a nonstock, not-for-profit organization organized primarily to establish and provide a private institutional medium that will initiate, sponsor, promote, assist or conduct programs and projects geared towards research and development in the various fields of engineering and other related sciences or fields of endeavor. No part of the excess of revenues over expenses or assets of the Foundation inures to or belongs to any officer, member or private individual. The Foundation's registered office address is Room 218, Junio Hall, UP Campus, Diliman, Quezon City.

The Foundation has been granted by the Bureau of Internal Revenue (BIR) an exemption from payment of income tax as a corporation organized purely for scientific purposes as contemplated by Section 30(E) of the National Internal Revenue Code, as amended in 1998.

The Foundation was granted by the Philippine Council for NGO Certification (PCNC) the status of a certified donee institution on April 20, 2004. Such accreditation is in accordance with the provisions of Revenue Regulations (RR) No. 13-98 effective January 1, 1999. Accordingly, donations received shall entitle the donor's to full or limited deduction pursuant to Section 34 (H) (1) or (2) and exemption from donor's tax pursuant to Section 101 (A) (3) of the National Internal Revenue Code of 1997, subject to the representations and commitments set forth in the application for accreditation filed with the PCNC.

On December 18, 2014, the Foundation applied for the renewal of its accreditation as a certified donee-institution with the PCNC. On April 1, 2015, the BIR issued the Foundation a Certificate of Registration as a donee-institution under RR No. 13-98, valid until November 3, 2017 subject to extension until February 18, 2020. On December 7, 2017, the Foundation received the renewal of registration from the Department of Science and Technology (DOST 17-FR-06) good for another three years. As stated on the certificate of registration issued by the BIR, such renewal automatically extended the Foundation's accreditation as a donee-institution until February 2020. However, due to the lockdown starting in March 2020, PCNC was not able to conduct the in-person renewal process. But, with PCNC's endorsement for temporary extension, this registration was extended by BIR until December 31, 2020, and then granted another extension until June 30, 2021. The in-person renewal process was carried out by PCNC in September 2021. Subsequently, the Foundation received its PCNC Certificate of Accreditation for five years on October 27, 2021 valid until October 26, 2026, and its BIR Certificate of Registration # 168-2021 on November 26, 2021, good for three years until July 8, 2024.

Authorization for Issuance of the Financial Statements

The financial statements of the Foundation as at December 31, 2022 and 2021 and for the years then ended, were approved for issuance by the Adhoc Committee, as authorized by the Board of Trustees, on May 31, 2023.



the amounts are not recoverable. If so, an impairment loss is recognized immediately in excess of revenue over expenses under the statements of revenues and expenses and the carrying value of the receivable is reduced through the use of an allowance account. Amounts which the Foundation deems fully uncollectible are directly written off against the related receivables.

If there is objective evidence that an impairment loss on receivables has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the receivables' original effective interest rate (i.e., the effective interest rate computed at initial recognition).

Basic Financial Instruments

The Foundation's basic financial instruments are composed of financial assets and financial liabilities. Financial assets consist of the Foundation's cash and cash equivalents, accrued interest receivables and investments. Financial liabilities consist of accounts payable, accrued expenses, unearned income and trust fee payables.

Initial recognition and measurement

The Foundation recognizes a financial asset or a financial liability only when it becomes a party to the contractual provisions of the instrument. A financial asset or financial liability, except for those designated at fair value through profit or loss (FVPL), is initially measured at their transaction price including transaction costs, unless the arrangement constitutes, in effect, a financing transaction. If the arrangement constitutes a financing transaction, the Foundation measures the financial asset or financial liability at the present value of the future payments discounted at a market rate of interest for a similar debt instrument.

Subsequent measurement

At the end of each financial reporting period, the Foundation measures a financial asset or financial liability, as follows, without any deduction for transaction costs which the Foundation may incur on sale or disposal:

- debt instruments are measured at amortized cost using EIR method. Debt instruments that are classified as current assets or current liabilities shall be measured at the undiscounted amount of the cash or other consideration expected to be paid or received (i.e. net of impairment) unless the arrangement constitutes, in effect, a financing transaction. If the arrangement constitutes a financing transaction, the Foundation measures the debt instrument at the present value of the future payments discounted at a market rate of interest for a similar debt instrument. Interest income earned from debt instruments are recognized as interest income of the Foundation.
- commitments to receive a loan that permit the issuer to prepay a debt instrument or permit the holder to put it back to the issuer before maturity shall be measured at cost less any impairment; and investments in non-convertible preference shares and non-puttable ordinary or preference shares are measured at fair value. If the shares are publicly traded or their fair value can otherwise be measured reliably, the investments are measured at fair value with changes in fair value recognized in additions to or deductions from fund balances in the statement of revenue and expenses. All other investments are measured at cost less any impairment.
- The amortized cost of a financial asset or financial liability is the present value of future cash flows discounted at the effective interest rate and the related interest income or expense is equal to the carrying amount of the financial asset or financial liability at the beginning of the financial reporting period multiplied by the effective interest rate.



2. Summary of Significant Accounting Policies and Financial Reporting Practices

Basis of Preparation

The financial statements of the Foundation have been prepared under the historical cost basis, except for financial assets measured at fair value. The financial statements are presented in Philippine peso (Peso), which is the Foundation's functional and presentation currency. All amounts are rounded to the nearest Peso, except when otherwise indicated.

Statement of Compliance

The Foundation's financial statements have been prepared in accordance with the Philippine Financial Reporting Standard for Small and Medium-sized Entities (PFRS for SMEs).

Summary of Significant Accounting Policies

The significant accounting policies that have been used in the presentation of the financial statements are summarized below. These accounting policies have been applied to all the years presented, unless otherwise stated.

Current versus Noncurrent Classification

The Foundation presents assets and liabilities in statements of assets, liabilities and fund balances based on current/non-current classification. An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within 12 months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

All other assets are classified as noncurrent.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within 12 months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period.

The Foundation classifies all other liabilities as noncurrent.

Cash and Cash Equivalents

Cash is comprised of cash in banks. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash with original maturities of up to three months or less from dates of acquisition, and that are subject to an insignificant risk of change in value.

Receivables

Receivables include those arising from advances, interest and others. Receivables arising from advances for administration and projects are recognized initially at original invoice amount while interest receivable are recognized at the nominal amount of interest that would be received from financial institutions. Where credit is extended beyond normal credit terms, receivables are measured at amortized cost using the effective interest rate (EIR) method. At the end of each reporting date, the carrying amounts of receivables are reviewed to determine whether there is any objective evidence that

Offsetting of Financial Instruments

Financial assets and financial liabilities are offset and the net amount reported in the statements of assets, liabilities and fund balances if there is a currently enforceable legal right to offset the recognized amounts and there is intention to settle on a net basis, or to realize the asset and settle the liability simultaneously. The Foundation assesses that it has a currently enforceable right of offset if the right is not contingent on a future event, and is legally enforceable in the normal course of business, event of default, and event of insolvency or bankruptcy of the Foundation and all of the counterparties.

Impairment of Financial Assets

The Foundation assesses at each financial reporting date whether there is objective evidence of impairment for financial assets that are measured at amortized cost. If there is objective evidence of impairment, the Foundation recognizes an impairment loss as deductions from the fund balances in the statements of revenue and expenses immediately. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that have occurred after the initial recognition of the asset (an incurred "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the contracted parties or a group of contracted parties is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization, and where observable data indicate that there is measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

Derecognition of Financial Assets and Financial Liabilities

Financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Foundation's statements of assets, liabilities and fund balances) when:

- The rights to receive cash flows from the asset have expired; or
- The Foundation has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Foundation has transferred substantially all the risks and rewards of the asset, or (b) the Foundation has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Foundation has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Foundation continues to recognize the transferred asset to the extent of its continuing involvement. In that case, the Foundation also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the risks and obligations that the Foundation has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Foundation could be required to repay.

Financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an

exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the statements of revenue and expenses.

The Foundation recognizes as additions to or deductions from the fund balances in the statements of revenue and expenses any difference between the carrying amount of the financial liability, or part of a financial liability, extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed.

Fund Balances

The Fund Balances account represents the cumulative balance of excess or deficiency of revenue over expenses. General funds are funds created to sustain the administrative activities of the Foundation. Endowed funds are funds established to continuously support and assist the research and development activities of the Foundation. Special funds are funds intended for research and development and engineering-related purposes. Any income arising from the funds are recognized as income by the Foundation.

Revenue

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Foundation and the revenue can be reliably measured. The Foundation assesses its revenue arrangements against specific criteria in order to determine if it is acting as a principal or an agent. The Foundation has concluded that it is acting as a principal in all of its revenue arrangements. The following recognition criteria must also be met before revenue is recognized:

Revenue from donations

Donations and grants are recognized on the date of receipt. All donations and grants received are considered available for general use unless specifically restricted by the respective donors or grantors.

Revenue from projects, and research and development activities

Revenue is recognized upon collection.

Interest income

Interest income is recognized as the interest accrues.

Dividend income

Dividend income is recognized when the Foundation's right to receive the dividend is established.

Expenses

Expenses are recognized in the statements of revenue and expenses when a decrease in future economic benefits related to a decrease in an asset or an increase of a liability has arisen that can be measured reliably. Expenses are recognized in the period in which they are incurred.

Foreign Currency Transactions

Transactions in currencies other than the Peso are initially recorded using the exchange rate prevailing at the transaction date. Outstanding monetary assets and liabilities, denominated in foreign currencies are restated at the functional currency closing exchange rate at the financial reporting date.

Provisions and Contingencies

Provisions are recognized when the Foundation has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the obligation.



Estimation of allowance for doubtful accounts

Allowance for doubtful accounts are recognized for accounts specifically identified to be doubtful of collection. Recoverability of specific receivables is evaluated based on the best available facts and circumstances, the relationship of the debtor with the Foundation and the length of such relationship, and the debtor's payment behavior and financial condition. The Foundation reviews the age and status of receivables, and identifies accounts that are to be provided with allowances on a continuous basis.

Allowance for doubtful accounts amounted to nil as of December 31, 2022 and 2021. The carrying values of receivables amounted to P4.6 million and P9.6 million as of December 31, 2022 and 2021, respectively (see Note 5).

4. Cash and Cash Equivalents

	2022	2021
Cash in banks	P26,574,276	P10,728,904
Cash equivalents	10,037,271	17,637,326
	P36,611,547	P28,366,230

Cash in banks earns interest at the respective bank deposit rates. Cash equivalents consist of short-term investments made for varying periods of up to three months depending on the immediate cash requirements of the Foundation and earn interest at the respective short-term investment rates.

Interest income earned from cash in bank amounted to P0.01 million in 2022 and 2021.

5. Receivables

	2022	2021
Advances for:		
Projects	P50,000	P50,000
Administration	-	2,203,617
Employee	-	60,000
Accrued interest (Note 6)	4,456,673	7,294,025
Others	91,215	32,344
	P4,597,888	P9,639,986

The advances for projects are funds advanced for the purchase of supplies used for research and for related purposes

In 2022, management has written off long outstanding receivables amounting to P5.0 million.

Investments

As of December 31, 2022:

	Philippine National Bank (PNB)	Metropolitan Bank and Trust Company (MBTC)	In-house Managed	Total
Debt securities:				
Government bonds	P-	P-	P88,241,965	P88,241,965
Corporate notes	7,720,000	15,490,236	41,530,533	64,740,769
Accumulated fair value changes	-	(8,839,457)	-	(8,839,457)
	7,720,000	6,650,779	129,772,498	144,143,277

(Forward)



Contingencies are not recognized in the financial statements, but disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. A contingent asset is not recognized in the financial statements but disclosed in the notes to financial statements when an inflow of economic benefits is probable.

Events After the End of Reporting Period

Events after the end of financial reporting period that provide additional information on the Foundation's financial position at the end of the reporting period (adjusting events) are reflected in the financial statements. Events after the end of financial reporting period that are not adjusting events are disclosed in the Notes to Financial Statements when material.

3. Significant Judgments, Accounting Estimates and Assumptions

The preparation of the financial statements in accordance with PFRS for SMEs requires management to make judgments, estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The judgments, estimates and assumptions used in the financial statements are based on management's evaluation of the relevant facts and circumstances as of the date of the financial statements.

Accounting assumptions, estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Judgments and Estimates

In the process of applying the Foundation's accounting policies, management has made the following judgments, apart from those involving estimations, which have the most significant effects on amounts recognized in the financial statements:

Determination of functional currency

Based on the economic substance of the underlying circumstances relevant to the Foundation, the functional currency of the Foundation has been determined to be the Peso. It is the currency that mainly influences the Foundation's revenues and expenses.

Classification of basic financial instruments

The Foundation exercises judgment in classifying a basic financial instrument, or its component parts, on initial recognition as either a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual arrangement and the definition of a financial asset, a financial liability or an equity instrument. The substance of a basic financial instrument, rather than its legal form, governs its classification in the statements of assets, liabilities and fund balances.

Impairment of financial assets measured at cost and amortized cost

The Foundation treats financial assets measured at cost and amortized cost as impaired when there is objective evidence of impairment. The assessment whether there is an objective evidence of impairment involves significant judgment. In making this judgment, the Foundation evaluates and determines whether the contracted parties or a group of contracted parties is experiencing significant financial difficulty, default or delinquency in interest or principal payments, whether it is probable that they will enter bankruptcy or other financial reorganization, and where observable data indicate that there is measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults. If there is objective evidence of impairment, the Foundation shall recognize an impairment loss directly as deduction from the fund balances in the statements of revenue and expenses. There were no indications of impairment in 2022 and 2021.

	Philippine National Bank (PNB)	Metropolitan Bank and Trust Company (MBTC)	In-house Managed	Total
Equity securities:				
Shares of stocks	-	-	31,319,504	31,319,504
Accumulated fair value changes	-	(245,000)	-	(245,000)
	-	-	31,074,504	31,074,504
Mutual funds	-	-	90,564,109	90,564,109
Accumulated fair value changes	-	-	13,327,319	13,327,319
	-	-	103,891,428	103,891,428
Total Investments	P7,720,000	P6,650,779	P264,738,430	P279,109,209

As of December 31, 2021:

	Philippine National Bank (PNB)	Metropolitan Bank and Trust Company (MBTC)	In-house Managed	Total
Debt securities:				
Government bonds	P-	P-	P78,741,965	P78,741,965
Corporate notes	1,120,000	20,490,236	43,530,533	65,140,769
Accumulated fair value changes	-	(8,839,457)	-	(8,839,457)
	1,120,000	11,650,779	122,272,498	135,043,277
Equity securities:				
Shares of stocks	-	-	29,798,858	29,798,858
Accumulated fair value changes	-	-	(245,000)	(245,000)
	-	-	29,553,858	29,553,858
Mutual funds	-	-	115,564,109	115,564,109
Accumulated fair value changes	-	-	8,242,083	8,242,083
Total Investments	P1,120,000	P11,650,779	P275,632,548	P288,403,327

The movement of the Foundation's total investment portfolio follows:

	2022	2021
Balance at beginning of year	P288,403,327	P288,858,861
Acquisitions	16,600,000	64,202,225
Retirement	(32,500,000)	(62,382,225)
Fair value changes for the year, including those recycled through profit or loss	6,605,882	(2,275,534)
Balance at end of year	P279,109,209	P288,403,327

Presented below are the movements in the accumulated fair value changes and allowance for probable losses of investments:

	MBTC	In-house Managed	Total
As at December 31, 2020	(P5,759,166)	P9,368,917	P3,609,751
Unrealized loss on changes in fair values	(3,080,291)	(1,371,834)	(4,452,125)
As at December 31, 2021	(P8,839,457)	P7,997,083	(P842,374)
Unrealized gain on changes in fair values	-	6,605,882	6,605,882
As at December 31, 2022	(P8,839,457)	P14,602,965	P5,763,508



Interest income from these investments amounted to P5.6 million and P7.7 million in 2022 and 2021, respectively. Accrued interest receivable amounted to P4.4 million and P7.3 million as of December 31, 2022 and 2021, respectively (see Note 5). Fair values of investments in equity securities are based on the quoted market prices at the close of business at the end of the reporting period.

Dividends received from the investment in house managed amounted to P0.75 million in 2022.

7. Property and Equipment

As of December 31, 2022:

	Office Furniture and Equipment
Cost	
Balance at beginning of year	P24,520
Additions	-
Transfers	-
Balance at end of year	P24,520
Accumulated Depreciation	
Balance at beginning of year	10,272
Depreciation (Notes 14 and 15)	10,272
Balance at end of year	10,272
Net Book Values	P14,248

As of December 31, 2021:

	Office Furniture and Equipment
Cost	
Balance at beginning of year	P-
Additions	24,520
Transfers	-
Balance at end of year	P24,520
Accumulated Depreciation	
Balance at beginning of year	-
Depreciation (Notes 14 and 15)	-
Balance at end of year	-
Net Book Values	P24,520

8. Accounts Payable and Other Current Liabilities

	2022	2021
Accounts payable	P13,080	P1,167,800
Accrued expenses	77,173	336,038
Unearned income	-	840,000
Trust fee payables	-	109,943
Withholding taxes	131,715	85,451
Social Security System (SSS), Philhealth, Pag-ibig and Home Development Mutual Fund (HDMF) contributions	43,017	44,397
	P264,985	P2,583,629



Special Funds

These are funds intended for research and development and engineering-related purpose, but some special-purpose project funds, such as those which are continuing and long-term in nature, may also be classified under other funds. The Special Funds consist of the following funds:

	2022	2021
UPCOE Modernization Fund	P3,315,845	P1,033,404
Special Projects - UPSCAIE	2,356,550	6,507,191
Special Projects - Golden Pillar	2,019,766	1,919,766
Special Projects	1,880,000	-
Special Projects - Infinity walk	900,000	-
UPCOE - Institute of Civil Engineering	836,205	836,205
Annual Professorial Chair Fund	737,528	-
UPCOE Research & Development Fund	724,821	713,446
Engkansya	617,862	617,862
Special Projects - Golden Jubilee	463,980	-
Road applications of cement project	232,338	232,338
UPCOE Industrial/Mechanical Engineering	163,404	163,404
Tau Alpha Student Loan Guarantee	121,328	121,328
Special Honorarium	28,941	28,941
IE 298 Class Hackathon	28,271	28,271
UPCOE - Industry and Government Linkage with Academe Program (IGLAP)	12,076	12,076
UPCOE - Department of Mining, Metallurgical and Materials Engineering (DMME)	7,168	7,168
HPC Modernization Fund	-	956,814
Annual Scholarships and Student Awards Fund	-	172,500
Others	111,065	111,065
	P14,557,148	P13,461,779

10. Supplementary Information Required Under RR No. 34-2020 and No. 15-2010

Requirement under RR 34-2020

The Foundation is not covered by the requirements and procedures for related party transactions specifically on the submission of the Information Return on Transactions with Related Party (BIR Form No. 1709) provided under Section 2 of Revenue Regulations No. 19-2020, as amended by Revenue Regulations No. 34-2020.

The Foundation reported and/or paid the following types of taxes in 2022:

a. Withholding Taxes

The details of the Foundation's withholding taxes paid in 2022 are as follows:

Expanded withholding taxes	P492,950
Withholding taxes on compensation and benefits	3,852
	P496,802



Accounts payables are non-interest bearing and are normally payable 30 to 60-day credit term. Accrued expenses pertain to accrual of professorial chair, faculty awards and student's scholarship. Unearned income pertains to donation already received from donors of professorial chair awards that will be released in future years. The Foundation reversed the long outstanding payable amounting to P2.1 million in 2022.

9. Fund Balances

General Funds

These are funds created to sustain the administrative activities of the Foundation, research and development projects of Intel Philippines (Intel) and non-research and development projects of National Hydraulic Research Center (NHRC), National Engineering Center (NEC) and UP College of Engineering (UPCOE). General funds consist of the following:

	2022	2021
Project Fund	P65,745,631	P65,745,631
General Fund	(18,772,896)	(8,621,158)
Intel Fund	3,041,786	3,041,786
	P50,014,521	P60,166,259

Endowed Funds

These are funds established to continuously support and assist the research and development activities of NHRC, NEC and UPCOE, professorial chairs, technology development and strategic studies, teaching and research grants, scholarships, faculty development and the implementation of awards and incentives. Most of these are perpetual in nature and self-sustaining since these are interest-bearing funds, while other funds are also classified under this fund to reflect their continuity and long-term nature. Endowed funds consist of the following:

	2022	2021
Professorial Chair Trust Fund	P167,458,274	P161,910,869
NEC Research and Development Fund	21,493,982	20,190,237
Student Scholarships and Awards Fund	14,576,960	17,859,076
UPCOE Research and Development Fund	13,705,838	12,874,493
Technology Development and Strategic Studies Fund	11,989,774	11,262,519
NHRC Research and Development Fund	7,402,591	6,953,577

(Forward)

Special-Purpose Fund	P7,074,251	P6,645,153
Faculty Development Fund	5,596,402	6,275,614
Faculty Awards Fund	3,936,904	4,132,106
Teaching Grants Fund	2,231,150	2,095,817
Department of Chemical Engineering	278,849	261,935
	P255,744,975	P250,462,396



b. Taxes and License Fees

In 2022, the Foundation paid annual registration fee amounting to P500.

c. Documentary Stamp Tax

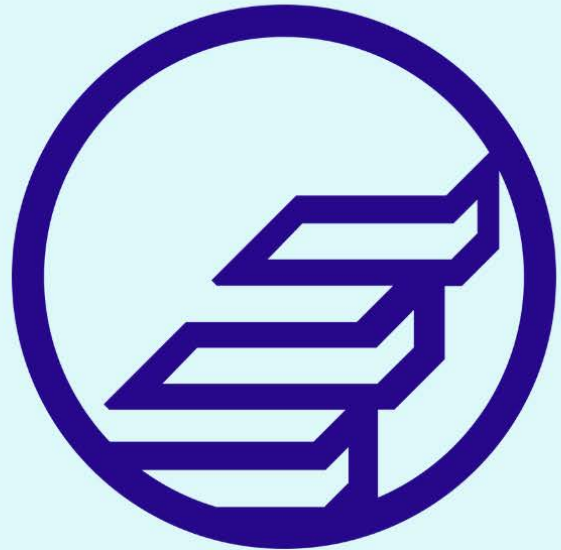
There has been no payment of any documentary stamp tax on loan instruments or other transactions subject thereto during the year ended December 31, 2022.

d. Tax Assessment and Cases

The Foundation has not received any Final Assessment Notice or Formal Letter of Demand from the BIR for its open years. Likewise, the Foundation has no other pending tax cases outside the administration of the BIR as of December 31, 2022.

*“Share your blessings,
Express your gratitude,
Demonstrate your passion,
Monetize your pride,
Memorialize your beloved,
Convert science to wealth,
Invest in UP Engineering”*

– whatever drives you – these will strengthen UPCOE in its efforts to build better and more engineers, problem solvers and solution implementers.



UPERDFI IS YOUR PARTNER

Philippines

UPERDFI is duly-registered with the following institutions:

- Securities and Exchange Commission as a non-stock, not-for-profit institution
- Bureau of Internal Revenue as a Donee Institution*
- Philippine Council for NGO Certification
- Department of Science and Technology

*For donations of at least ₱ 50,000, we provide a Certificate of Donation, which grants 100% expense deduction and donors' tax exemption.

Independent Auditor: SyCip, Gorres, Velayo & Co. (SGV & Co.)

Contact Person:

Alfonso "Tito" Aliga, Jr.
(+63) 927-798-0451
titonitaaliga@yahoo.com

USA

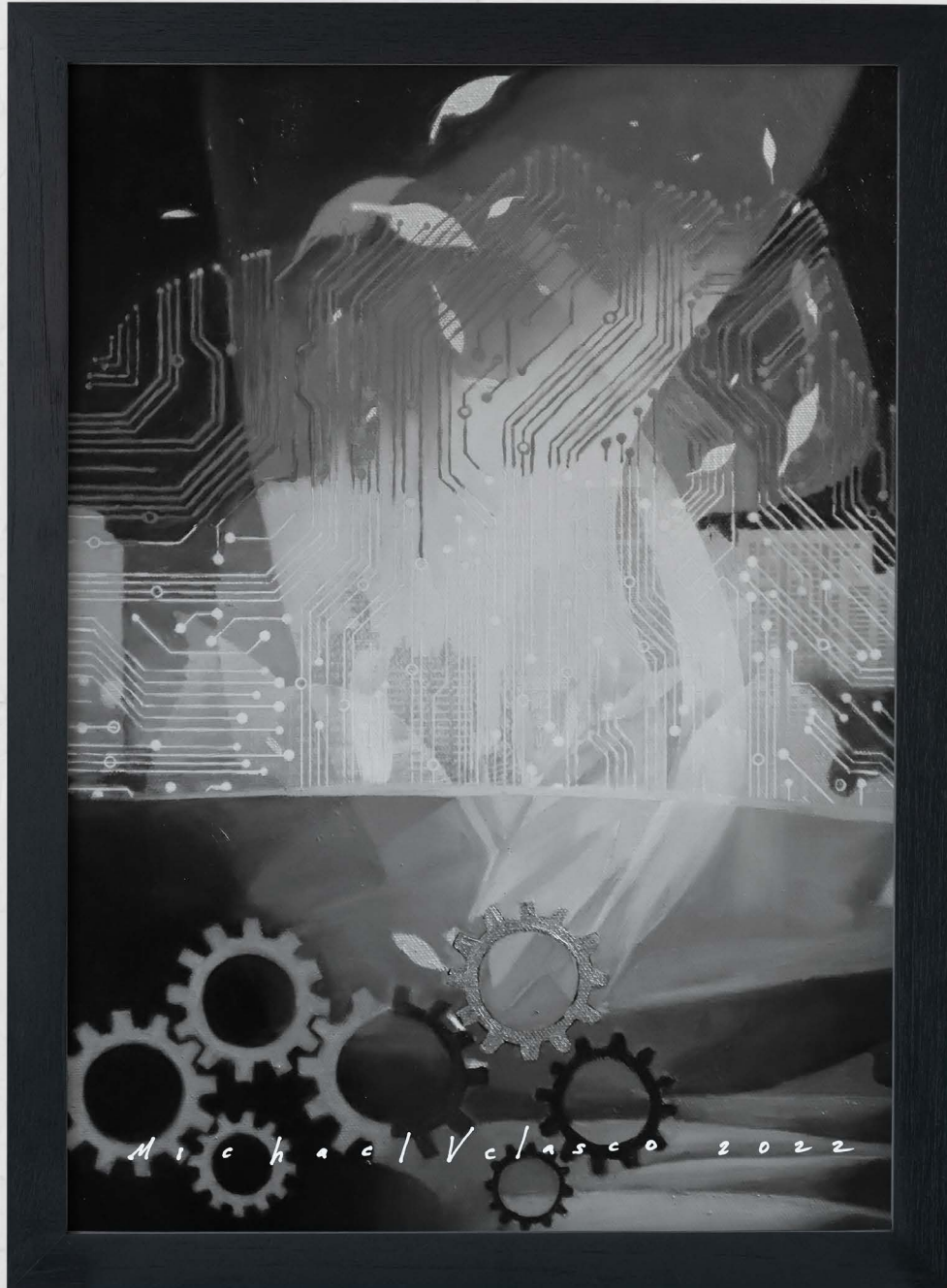
UPERDFI has a cooperative effort with the Friends of the University of the Philippines Foundation in America (FUPFA), a 501(c)3 charitable organization, which handles donations from US-based donors for UPCOE.

FUPFA (www.fupfa.org) issues an Acknowledgement Letter recognized by the US IRS for tax deductibility.

Contact Persons:

Rowena "Winnie" Torres-Ordoñez
(+1) 630-544-1099 (Mobile/Viber)
rjtorresordonez@alum.up.edu.ph

Rosario "Chato" Calderon
(+1) 650-922-9907 (Mobile/Viber)
rscksg@yahoo.com



Provenance Statement

This digital artwork, entitled "Crossing Over to the Next Golden Age" was awarded by the UP Engineering Research and Development Foundation, Inc. to significant donors in the past 50 years. It was created by artist Michael Velasco on May 3, 2022 exclusively for UPERDFI's Golden Anniversary Celebration.

and **MORE.**



UP Engineering
Research & Development
Foundation, Inc.

Room 218 Junio Hall, UP Campus,
Diliman, Quezon City, Philippines, 1101

✉ info@uperdfi.org

☎ 8981-8500 loc. 3015

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www.uperdfi.org