



Academic Highlights

TRUST Final Dissemination Event in the Philippines

Glance at the Future

Digital tools transforming university studies

Spotlight on Research

Advancing Energy Technology and Research Capacity in Africa



Academic Highlights

TRUST FINAL DISSEMINATION EVENT IN THE PHILIPPINES

The final dissemination event of TRUST project was held in Manila. It was organised by Mapúa University from 29th to 30th, August. All participants, professors, business actors, students benefited from two days of learning, networking, and intense promotion of FinTech education. Representatives from the TRUST Consortium and Fintech companies shared the most relevant best practices and trends, distilling lessons learned, and discussing roadblocks as well as the path ahead. TRUST Project International Coordinator Dr. Ilaria Reggiani (University of Studies Guglielmo Marconi, Rome, Italy), Dr. Dodjie Maestrecampo, President of Mapúa University, and George Royeca, President of Fintech Philippines Association and Co-founder and CEO of Angkas discussed digital transformation in the Higher Education, creating value in the FinTech industry, and how the TRUST Project promoted HE-industry linkage.

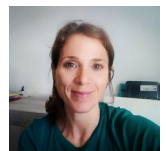


The protagonist of the event was the innovative TRUST University master's program in financial technology and digital innovation developed with the support of the European Union Erasmus+ Programme TRUST consortium.

At the TRUST Project National Event, Mapúa University, Saint Louis University, and University of Cebu - Philippine university partners of the TRUST Project - signed partnership agreements with TRUST FinTech industry partner FinTech Philippines Association. This collaboration aimed to conduct joint research, publish scientific papers, enhance capacity-building activities, provide opportunities for student interns and researchers, and organize joint conferences, workshops, and technical discussions. The importance of closer collaboration between the Fintech industry and academia was an underlying theme of the National Event. Academic research generates new knowledge and innovations, which need to be applied in real-world business contexts.

If you need more information, please visit the project website <https://trustproject.eu/>

by Ilaria Reggiani



CARBON CAPTURE, UTILISATION AND STORAGE & ALTERNATIVE FUELS

On September 20, 2023, Enrico Bocci, professor of Guglielmo Marconi University, participated in the 8th Carbon Capture, Utilisation and Storage & Alternative Fuels (H2020 HE CLUSTER WORKSHOP), representing Unimarconi as the coordinator of the GICO project. During the workshop, participants had the opportunity to outline the priorities of the CCUS and alternative fuels cluster and discuss the next steps to be taken, identify and develop synergies between projects, strengthen cooperation, and define best practices and common actions.

GICO aims to develop renewable energy technologies that will form the backbone of the energy system by 2030 and 2050 strengthening the EU leadership on renewables. Indeed, there is no renewable energy technology with higher commercial potential; lower environmental impacts and greenhouse gases emissions; better resource efficiency, social acceptance and cross-fertilisation with many sectors; foreseen lower cost than the use of residual waste biomass and renewable electricity excess via integration of HTC, SEG, HGC, CCSU, P2G and advanced biofuel and electricity production technologies.



**8° Carbon Capture, Utilisation
and Storage & Alternative Fuels**
H2020 HE CLUSTER WORKSHOP



Spotlight on Research

ADVANCING ENERGY TECHNOLOGY AND RESEARCH CAPACITY IN AFRICA



USGM participated in the in 5th consortium of the UNET PROJECT "University Network on PhD programs in Energy Technology funded through the EU Erasmus + programme". The event AAU – School of Mechanical and Industrial Engineering of the Addis Ababa University took place from the 4th to the 7th of September 2023 and gave the possibility to assess the project progress, work on completing the teaching and learning materials, plans for sharing of laboratories and plan for implementation of results. USGM has the role of quality assurance of the project activities and was represented during the meeting by Leo Donato, UNET Project Manager.

The 3-year Erasmus+ project "University Network on PhD programs in Energy Technology, UNET" started in January 2021. UNET includes eight African universities and two European universities. Access to sustainable energy is an important basis for the economic development of a country and for the quality of life of the population. For the partner countries of this project new energy technology is needed for the transition from fossil fuel to renewable energy sources (RES). Innovation and highly skilled human resources are of outmost importance for technology development in the field. The universities can support this transition by providing the manpower and the research needed.

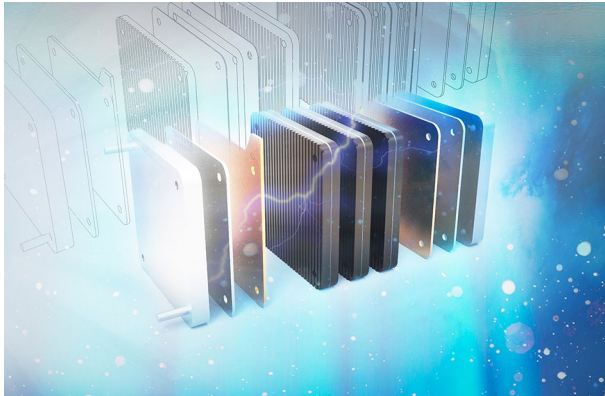
The partner universities acknowledge the needs for introducing taught PhD programs with organized course-work and associated needs for specializing and improving the laboratories. The solution to this problem is to jointly develop a PhD Course Catalogue and to share access to specialized laboratories.

UNET responds to the need for improved research capacity in terms of skills and competences required to perform high-impact research, to tailor energy technologies to local needs and to enable technical and social innovations required to address the energy challenges.

SOLID OXYGEN FUEL CELL COMBINED HEAT AND POWER: FUTURE-READY ENERGY

Guglielmo Marconi University is partner of SO-FREE European project (2021 -2024), funded by the Fuel Cells Hydrogen 2 Joint Undertaking (JU) under the framework of European Commission Horizon 2020 programme. Preliminary system architecture definition and components requirements to work with two different types of stacks and different kind of fuel has been carried out by AVL. Virtual twin of both IKTS and Elcogen stack was set up and operated under a wide range of operating conditions in order to have a clear system understanding. The process flow diagram (PFD) and Heat & Mass balances (H&M) balance have been carried out by ICI in order to optimize the efficiency and heat management of the system with the two types of different stacks and fuels.

Aspen Plus simulations, taking into account important design parameters (e.g. inlet fuel composition, split fraction leading to the performer section, fuel utilization ratio and the split fractions of air and fuel recycle streams) have been developed to improve the system design in terms of heat management and power efficiency.

 SO-FREE

Partners are going to meet in Verona (north of Italy) at the ICI Caldaie Italian headquarter, the 25-26 of October 2023.

For further information, please visit <https://www.so-free.eu/>

or send an e-mail to progettieuropei@unimarconi.it

by Susanna Correnti



Glance at the Future

Digital tools transforming university studies

In the digital age, technology has transformed nearly every aspect of our lives, and education is no exception. University students today have access to a wide array of digital tools that are reshaping the way they learn, study, and collaborate. These tools have become invaluable in assisting students in their academic endeavors, helping them achieve better results, manage their time more efficiently, and foster a deeper understanding of their subjects. In this article, we will explore some of the most impactful digital tools that are revolutionizing university studies.

Gone are the days of carrying stacks of notebooks and pens. Note-taking apps like Evernote, OneNote, and Notion have made it easier for students to organize and access their notes digitally. These tools offer features like synchronization across devices, the ability to add multimedia content, and powerful search functions to help students manage their study materials efficiently.



Citing sources and managing references is a crucial aspect of academic writing. Tools like Zotero, Mendeley, and EndNote help students collect, organize, and format citations, streamlining the process of creating bibliographies and reference lists. These tools are indispensable for writing research papers and dissertations.

University libraries have evolved in the digital era, providing students with access to a vast collection of digital resources. Online databases like JSTOR, PubMed, and Google Scholar offer a treasure trove of academic papers, articles, and books, making research more accessible and convenient.

Collaboration is essential in many university courses, and digital tools have made it easier for students to work together, regardless of their physical locations. Platforms like Google Workspace (formerly G Suite), Microsoft Teams, and Slack facilitate group projects, document sharing, and real-time communication among students.

Staying organized and managing time effectively is often a challenge for university students. Study management apps like Trello, Asana, and Todoist help students create to-do lists, set reminders, and track their progress, ensuring they stay on top of assignments, exams, and deadlines.

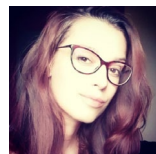
For students in science, technology, engineering, and mathematics (STEM) fields, virtual labs and simulations have become invaluable. These tools enable students to conduct experiments, explore complex concepts, and gain practical experience without the need for physical laboratory access.

With the rise of e-books and e-readers, students can carry an entire library in their pocket. Digital books, often more affordable than print editions, are easily accessible on devices like Kindle, Nook, and tablet computers. They also provide features like highlighting, note-taking, and instant dictionary lookup.

Writing essays and papers can be a daunting task for university students. Online writing assistance tools like Grammarly, Hemingway Editor, and ProWritingAid help students improve their writing, correct grammar and spelling errors, and enhance the clarity and readability of their work.

The advent of digital tools has revolutionized the way university students approach their studies. These tools provide accessibility, efficiency, and flexibility that were once unimaginable. While they cannot replace the value of personal interaction and face-to-face learning entirely, they complement traditional education by offering a wide range of resources and conveniences. Students who embrace these digital tools can enhance their academic performance and pave the way for success in their university studies and beyond. As technology continues to advance, it is likely that even more innovative tools will emerge, further transforming the landscape of higher education.

by [Darina Chesheva](#)





GMU Magazine has been released with the contribution of all academic staff and partners around the world, if you wish to contribute highlighting any important news in accordance with the line of the release, please do not hesitate to contact us sending an email to d.chesheva@unimarconi.it