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Ābstract Book

8th Global Webinar on Applied Science, Engineering and Technology

November 01-02, 2023

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Upcoming Events-2023

10th Global Webinar on Traditional and Integrative Medicine	November 09-10, 2023
9th Global Webinar on Forensic Science	November 09-10, 2023
9th Global Webinar on Forensic Science	November 15-16, 2023
8th Global Webinar on Materials Science and Engineering	November 22-23, 2023
Global Webinar on Civil and Infrastructure Engineering	November 27-28, 2023
4th Global Webinar on Laser, Optics and Photonics	November 29-30, 2023
8th Global Webinar on Public Health	December 05-06, 2023
Global Webinar on Vaccines Research and Development	December 07-08, 2023

Upcoming Events-2023 & 2024

Global Webinar on Pharmaceutics and Drug Delivery Research	*December 14-15, 2023*
6th Global Webinar on 3D Printing and Additive Manufacturing	*December 12-13, 2023*
Global Webinar on Food Science and Technology	*December 12-13, 2023*
Global Webinar on Vaccines Research and Development	*December 12-13, 2023*
3rd Edition of Global Webinar on Nanotechnology and Nanoscience	*February 27-28, 2024*
9th Global Webinar on Applied Science, Engineering and Technology	*March 06-07, 2024*
11th Global Webinar on Traditional and Integrative Medicine	*March 13-14, 2024*
2nd Global Webinar on Neuroscience and Brain Disorders	*March 27-28, 2024*
Global Webinar on Renewable and Sustainable Energy	*April 03-04, 2024*

Prof. Dr. M.E. Fayad
San Jose State University, USA

The word is a science that we parally know

We aim to show the WORD as a science that we partially know. However, it is essential to distinguish between the word and its concepts.

We must understand the difference between a word and its concepts. The word has a meaning that represents a stable science with multiple different and changeable ideas, masks, and views, most of which are variable. We discovered more than 50 innovative keys (discoveries) and more than 100 pieces of facts per WORD. We provided creative answers to more than 300 questions per word in the ordinary language dictionaries, representing literature, science, engineering, knowledge, philosophy, and other branches of science. Furthermore, we will focus our talk on the WORD as a SCIENCE. Our existing knowledge has many problems due to our ignorance of the value and use of words. We may wonder what has been happening in the present years because of many epidemics, inflation, global hunger, unjustified wars, increasing conflicts, and degrading human rights everywhere, including the USA. We are at the lowest level of proper knowledge. You may wonder why. This is because we need to understand a word's importance when we use it properly. A word is a responsibility, honor, lifestyle, discipline, and one of the universe's secrets. Studying the existing concept of "innovation," we found many contradictory and problematic definitions from many innovators, business and political leaders, and others. They treated the WORD "innovation" as "Industrial Object (IO)," or "instance objects," "changeable," and "replaceable." We consider the WORD innovation "Business Object (BO)," which is "unified," internally "stable," and "externally adaptable." This example shows that the word innovation has several concepts, considered different "masks" or "views" of a WORD innovation. Therefore, the existing innovations failed. Studying the existing concept of "creativity," we found many contradictory and problematic definitions from architects, designers, analysts, system modelers, professors, producers, teachers, and others. They treated the word "creativi-

ty" as a "Business Object (BO)," which is "unified," internally "stable," and "externally adaptable." We consider the WORD creativity "Enduring Business Theme (EBT) "unified," "stable," and "continuous." WORD. This example shows that a word's creativity has several concepts, considered different "masks" or "views" of a word's innovation. Therefore, the existing creativity failed. As we recommend, knowing the WORD leads to proper research and development. It turns your study and product into the economic wealth of morals, unified and stable knowledge, and human growth.

Biography:

Prof. Dr. M.E. Fayad is Full Professor at SJSU and a Founder and CEO at AITG, Aeeh Press, and i-SOLE. Previously, he was J.D. Edwards's professor of Software Engineering in the Department of Computer Science & Engineering at the University of Nebraska, Lincoln, from 1999 to 2002. Dr. Fayad is a well-known and recognized authority in theory and the applications of Software Engineering, Linguistic Engineering, and the Art of Abstraction. Fayad's publications are in the very core archival journals and conferences in the field of software engineering. Dr. Fayad was a guest editor on 11 theme issues. Dr. Fayad has published more than 300 high-quality articles, which include profound and well-cited reports (more than 50 in number) in reputed journals, over 100 advanced articles in refereed conferences, more than 25 well-received and cited journal columns, 16 blogged columns, 11 well-cited theme issues in prestigious journals and flagship magazines, 24 different workshops in very respected conferences, over 125 tutorials, seminars, and short presentations in more than 25 States in the USA since 1978 and 52 other countries. Dr. Fayad is also filling for eight new, valuable, and innovative patents and has developed over 800 stable software patterns and brought a breakthrough in software engineering. Dr. Fayad earned an MS and a Ph.D. in computer science and engineering from the University of Minnesota at Minneapolis. His research topic was OO Software Engineering: Problems and Perspectives. He is the lead author of several classic Wiley books, CRC, and Aeeh Press, Inc.

Prof. J. C. Umavathi
Gulbarga University, India

Study of Multilayer Flowof Two Immiscible Nanofluids in a Ductwith Viscous Dissipation

Numerical simulations for the mixed convective multilayer flow of two different immiscible nanofluids in a duct with viscous heating effects were developed in this study. The duct is insulated on the top and bottom faces, while the left and right faces of the duct remained isothermal. The mathematical governing system for each layer consists of an incompressibility condition equation, the Navier-Stokes momentum equation, and the conservation of energy equation. At the interface of the immiscible layer, the continuity of velocity, shear stress, temperature and heat flux is considered. The dimensionless equations governing each layer were numerically integrated using the finite difference method and the Southwell-over-Relaxation method. A comprehensive mesh independence test is conducted. Furthermore, a parametric study is performed to analyze how the different nanoparticle volume fractions and viscous heating affect the transport characteristics of engine oil-copper and mineral oil-silver nanofluids. The study also examined the effects of various types of nanoparticles and base fluids. The results demonstrated that heat transport could be efficiently controlled by considering the viscous heating aspect. Moreover, the effects of different nanoparticles on heat transport were found to be more significant than those of base fluids. Finally, a point-wise comparison of our numerical results demonstrates a strong agreement with existing studies in literature.

Biography:

Prof. J.C. Umavathi completed her Post Doctral from the Department of Engineering, University of Sannio, Piazza Roma 21, 82100 Benevento, Italy. She is working as Professor in the Department of mathematics, Gulbarga University since 1993. She has published more than 215 research articles in reputed international journals. She is a recipient of Kalpana Chawla Young Scientist award, Sir J.C. Bose award and Erasmus Mundus Fellowship.

Dr. Tomasz Krystofiak
Poznan University of Life Sciences, Poland

Surface topography as a method for analysis of UV lacquer coatings

UV lacquer coatings are very popular in the woodworking industry. This solution belongs to the green chemistry, energy saving and ecological technologies. Nowadays very interesting are digital and printing technologies in which from 5 up to 12 layers of lacquer system can be applied.

Ready to use furniture board elements prepared in this technologies are characterized by high resistance, very good and stable aesthetic-decorative features and modern and unique design.

Sometimes some defects in the interlayer adhesion can be observed. Scientists in their works and technical staff in the laboratories are looking for very fast and good investigation method for surface analysis. To this methods belongs wettability, roughness and topography.

This presentation presents the results of surface investigations of the finished wood based materials by the use of profilometer and optical tensiometer.

Biography:

Dr. Tomasz Krystofiak in 1994 was finished study of Faculty of Wood Technology at Agriculture Academy in Poznan. In 2002 he prepared a PhD dissertation and in 2019 habilitation. Author or co-author of more than 300 scientific publications in the scope of gluing and finishing of wood and wood based composites. To his research activities belongs surface phenomena, wettability, adhesion and adherence, modification, gluability and paintability of lignocellulosic materials. He was a Management Committee Member of COST Actions FP1006 and CA15216 and Working Group Member (FP1303 and FP1407). Since 2021 Guest Editor in 6 Special Issues in Coatings, Forests, Materials journals.

Prof. Dr. Svetlin Georgiev
Sorbonne University, France

Dynamic Geometry of Manifolds on Time Scales

The theory of time scales was introduced by Stefan Hilger in his PhD thesis in 1988 (supervised by Bernd Aulbach) in order to unify continuous and discrete analysis and to extend the continuous and discrete theories to cases \in between". The main aim of this lecture is to present an introduction to the theory of manifolds on arbitrary time scales. They are introduced and investigated atlases, charts, morphisms , submanifolds, immersions, submersions, manifolds with boundary and vector bundles. The lecture is provided with suitable examples.

Biography:

Svetlin G. Georgiev works on various aspects of mathematics. His current research focuses on harmonic analysis, ordinary differential equations, partial differential equations, fractional calculus, time scale calculus, integral equations, numerical analysis, differential geometry, and dynamic geometry.

Prof. Dr. Bruno Carpentieri
University of Bozen-Bolzano, Italy

Fast H 2 -Matrix Arithmetic Based Linear Solvers for Thermonuclear Energy Research

Fusion power may offer a long-termenergy supply with an uninterrupted power delivery, a high power-generation density and no greenhouse gases emissions, contributing to prevent the worst effectsof climate changeand making an enduring contribution to future energysupply. The intenseconditions inside a fusion power plant (extremetemperatures and high magnetic fieldsnecessary for nuclear fusion) call for addressingseveral potential problems.Mathematical modelling attempts to overcome some of the hindrances posed by these complexities. In this talk, we considerthe numerical solutionof the Magneto-Quasi-Static (MQS) problem in terms of an integral formulation based on the electric vector potential. The application case refers to a large scale problem arising in nuclear fusion devices. Integral formulations give rise to discrete models characterized by dense matrices.Compression techniques, iterativesolvers and parallelcomputing are the only viable options for treating large scale simulations in this context. A key role is played by the design of the preconditioner, which is required to be robust, cost effective and highly parallelizable. We present preconditioning strategies based on the theory of H2-matrix representation, which provides a general mathematical framework for a highly compactand kernel independent accurate representation of integral equations, built by means of the decomposition of small rank blocks with almost linear complexity..

Biography:

Bruno Carpentieri has completed his PhD in Computer Science from the Institut National Polytechnique de Toulouse, France, and postdoctoral studies from University of Graz and CRS4 Sardinia. He served as an Assistant Professor at the University of Groningen and as a Reader in Applied Mathematics at Nottingham Trent University. Since May 2017 he is an Associate Professor in Applied Mathematics at the Faculty of Computer Science, Free University of Bozen-Bolzano. He has published about 50 papers in reputed journals and has been serving as a member of the scientific advisory board of several conference panels in computational mathematics and high-performance scientific computing.

Dr. Glenn Tony Manuel Barrera
Barrera Science Lab, Sweden

After the James Webb telescope came, - The Quantum Wave Relativistic model still stands

We will here show and make proofs for the General Relativistic solution of the Expansion of the Universe. Including coherence with the "new" knowledge from observations of the James Webb Telescope. We will start by deriving the Schwartzchild solution from the Friedmann Equation thus prooving that there exist a Relativistic solution to the problem.

We will introduce the 'Galaxy Equation' that can be derived from the Schwartzchild solution of General relativity, also we show some of Maxwells equations adapted to Gravitational waves.

The galaxy equation give the Rotation velocity of a Galaxy generally when it is combined with Keplers 3:rd Law. We can use the Galaxy Equation to describe the outgoing flow of matter of the Universe, the Galaxy Equation give us the rotation velocity but by using these we can also find the equation for a radially expanding Universe.

the values derived for the expansion of the universe are in the common accepted and measured range. We calculate acceleration, curvature, mass and velocity for the Universe. Also some useful mass and velocity formulas are given.

Biography:

Tony Barrera is a certified autodidact math genius. He have published more than 42 Ordinary high rated scientific papers And up to several hundred publications ,computer simulations and animations In different subjects, scientific papers in mathematics , computer graphics, numerical analysis, astrophysics and Particle Atomic physics. Tony does research general together with prof Ewert Bengtsson, Prof Anders Hast and Physicist Bo Thelin and the crew of Barrera Science Lab.

Dr. Chris McGinty
Skywise Cloud, USA

Error Mitigation and Correction in Quantum Computing using the Unified Equation of Physics (MEQ)

Quantumcomputinghasemergedasatransformativefieldwiththepotentialtorev l tionizevarious industries.However,thefragilenatureofquantumsystemsintr duceserrorsthathinderthe practicalimplementationofquantumalgorithms.Inthispr sentation,weexploretheapplicationof theUnifiedEquationofPhysics(MEQ)toaddressth criticalchallengeoferrormitigationand correctioninquantumcomputing. TheMEQ,representedasΨ(x,t)=ΨQFT(x,t)+ΨFractal(x,t,D,m,q,s),providesapowerfulframework thatcombinesfreequantumfieldtheory,mechanicalsystems,andfractalpotentialterms.Itoffersa comprehensiveapproachtoerrormitigationbyincorporatingthesolutionoffreequantumfield theory,theperturbativeeffectsofgravity,andtheself-similarfractalstructuredescribedbythe constantparametersV0,L,ands.TheMEQisaversatiletoolthatcanbefurtherenhancedby combiningitwithgeneralrelativity,enablingamoreaccuraterepresentationoftheperturbative effectsofgravityonthequantumfield.

ByapplyingtheMEQtoquantumcomputing,weunlocknewpossibilitiesforerrormitigationand correction.TheMEQallowsustounderstandandcontroltheinteractionsbetweenquantum systems,mitigatingerrorsandenhancingcomputationalaccuracy. Furthermore,theincorporationof theMEQenablesadvancementsinmachinelearning,speed,andcomputationalpower,pavingthe wayforthedevelopmentofmoreefficientandreliablequantumalgorithms.

Inthispresentation,wewilldiscussthetheoreticalfoundationsoftheMEQanditsapplicationin errormitigationandcorrectionforquantumcomputing.Wewillexplorethemathematicalformalism andpracticalimplicationsoftheMEQ,showcasingitspotentialtoaddressthechallengesfacedby quantumcomputers. Throughthisresearch,weaimtocontributetotheadvancementofquantum computinganditsintegrationintovariousdomains.

Keywords:Quantumcomputing,Errormitigation,Errorcorrection,McGintyEqua-

tion(MEQ),Quantum fieldtheory,Fractalpotential,Generalrelativity.

Biography:

Chris McGinty is a visionary entrepreneur who has revolutionized theoretical physics and artificial intelligence. With an unquenchable thirst for understanding the universe, Chris embarked on a quest to develop a unified framework that could transform our knowledge of nature. Through extensive research, he introduced the MEQ, an extraordinary unified equation bridging quantum physics and field theory. As the founder of the L_TOE (Lagrangian Theory of Everything) framework, Chris assembled a brilliant team and harnessed cutting-edge AI technologies to explore the intricacies of the MEQ. This endeavor birthed Skywise.ai, an innovative platform uniting quantum-inspired algorithms, computational resources, and simulation tools to advance various domains. Chris's unwavering pursuit of knowledge and commitment to pushing scientific boundaries have cemented his status as a pioneering figure. His work lays the groundwork for quantum computing, artificial intelligence, and our comprehension of the universe's fundamental laws. Through interdisciplinary collaboration, Chris inspires future generations, leaving an enduring impact on scientific progress.

Dr. Colrain M. Zuppo
Zuppo Consulting, USA

The power and promise of technological change and the challenge of remaining human

One of the biggest challenges society faces today is the unprecedented level and rate of technological change. Some believe artificial intelligence (AI) (e.g., robots) will destroy us, while others see these technological advances as the next big blessing for humanity. While there is no shortage of fear or hype about our technological future, what we are seeing in the world of productivity is a spate of new AI-driven tools that will help us work more securely, more efficiently, and therefore, more effectively.

In this keynote session, Dr. Zuppo will discuss the current state of technology development, deployment, and policy creation as they relate to AI, framed within the context of the top technological problems we face from a global perspective.

The keynote session will segue into a panel discussion featuring some of today's leading experts in the field and will focus on the intersection of AI, security, and people. The panel will explore what AI adoption looks like, and how organizations are leveraging technology to meet some of the biggest productivity challenges we face. In this panel session, we'll move beyond the hype and look long-term to how emerging technologies are being leveraged to solve problems that we've previously lacked the power to tackle.

Biography:

Dr. Colrain (Cori) Zuppo earned her PhD in Technology Management from Indiana State University with a specialization in Human Resource Development and Industrial Training. Cori's dissertation research was entitled "Organizations as consumers of human capital via technology: A policy study of information and communication technologies." Dr. Zuppo also published "Defining ICT in a Boundaryless World: The Development of a Working Hierarchy" which has been used around the world to define ICT sectors, establishing a hierarchy of applications for the term ICT or ICTs. Cori also holds an M.A.Ed. from The George Washington University and B.S. in Conflict Resolution from Ohio University. Cori holds professional certifications of SHRMSCP (Senior Certified Professional in HRM), Senior Professional in Human Resources (SPHR) and Global Professional in Human

Resources (GPHR). Cori's multidisciplinary research agenda is grounded in broad inquiry into the effects of technology on society. Of specific interest are the intended and unintended consequences of technological change and the ways in which those changes have shaped the way individuals and organizations learn, work, and interact. Dr. Zuppo consults in the areas of technology management/ forecasting, HRM, HRD, organization development, employee and labor relations, strategic organizational communication, and instructional design.

Mr Randall Bane
Merrill Lynch Wealth Mangements, USA

Transitioning into a new macroeconomic regime and the Transformation of our World

In this presentation, we cover the current situation of the major asset clssses. The current and historical trends in the major markets are presented and highlight that we believe we are entering a new macroeconomic regime. In this new regime it is possible that interest rates trend higher, inflation trends above average, that market volatility remains elevated and that monetary policy is less reactive.

Admist this uncertainty, there has been positive news. Equities have rallied with signs of broadening strength. We have seen the advent of a resilent U.S. consumer and that elevated inflation is trending lower and we believe we are heading towards a “Soft Landing”.

We look at our Chief Investment Office’s (CIO) Neutral View across the asset classes and describe what is meant by a Neutral View. The key to making progress in this environment is to maintain strategic and tactical discipline.

We take a look at the CIO’s Equity markets view and looking at the bull and bear markets historically and we see we are forming a foundation for a developing bull market.

We consider a total return mindset when thinking about your portfolio, and highlight the Fixed Income market view and our views on Alternative Investments.

We then move to the second part of our presentation in which we look at the Transforming World. We cover what has been invented in the last 10 years and contrast that with the projection for the next 10 years and highlight the fact that the projections for the

commercialization of these innovations were so far off.

We then look into the next wave of innovations and commercialization and how to avoid the next 'Kodak Moment' this time around. Then we contrast the data with the empirical law known as Moore's Law, and find that the new wave of innovation is challenged by the World's contraints such as rare earth materials, freshwater, food and demographics globally. We also look at the geopolitical environment, infrastructure and world domination. The key challenges for the next wave are reviewed, and the our projections for the key products are discussed..

Biography:

Mr. Randell Bane is a Senior Financial Advisor, Merrill Lynch Wealth Management. I focus on delivering a comprehensive approach to managing wealth that begins with listening to a client's needs and helping to ensure every strategy is grounded in an understanding of the clients goals and aspirations. I provide access to the investment insights of Merrill Lynch Wealth Management and banking convenience of Bank of America to help address the various aspects of clients financial lives. I have a passion for delivering excellent service and helping clients pursue and meet their financial goals. My years of experience in technology and finance at the executive level in Fortune 500 companies and start-ups makes me uniquely qualified to work with the technology elite in the valley to help them establish and achieve their financial goals.I focus on delivering a comprehensive approach to managing wealth that begins with listening to a client's needs and helping to ensure every strategy is grounded in an understanding of the clients goals and aspirations. I provide access to the investment insights of Merrill Lynch Wealth Management and banking convenience of Bank of America to help address the various aspects of clients financial lives. I have a passion for delivering excellent service and helping clients pursue and meet their financial goals. My years of experience in technology and finance at the executive level in Fortune 500 companies and start-ups makes me uniquely qualified to work with the technology elite in the valley to help them establish and achieve their financial goals.

Dr. Sailesh Iyer
Rai University. India

Artificial Intelligence Research Trends

Artificial Intelligence is emerging area of research with many use cases in all domains. According to Forbes, AI's use in healthcare will grow immensely, particularly when it comes to how doctors diagnose and treat patients with various ailments. Moreover, the use of machine learning is projected to rise within domains such as drug discovery and medical research. AI will become more integrated into everyday life, with the proliferation of smart homes, self-driving cars, and intelligent personal assistants. Computer Vision and Image Processing, AI and Robotics are tipped to change the traditional landscape of the world. My talk would cover the current and upcoming Research trends in Automation, Cyber Security, Data Management, NLP and various other domains. Artificial Intelligence can transform e-Governance resulting in Smart Cities and Smart Villages.

Biography:

Prof. Dr. Sailesh Iyer has a Ph.D. (In computer Science) and currently serving as a Professor and Dean with Rai University, Ahmedabad. He has more than 22 years of experience in Academics, Industry, and Corporate Training out of which 18 years are in core Academics. He has Patents to his credit and is involved as an Editor for various book projects with IGI Global (USA), Taylor and Francis (UK) and Bentham Science (UAE). A hardcore Academician and Administrator, he has excelled in Corporate Training, Delivered Expert Talk in various AICTE sponsored STTPs, ATAL FDPs, Reputed Universities, Government organized Workshops, Orientation, and Refresher Courses organized by HRDC, Gujarat University. Research Contributions include reputed Publications, Track Chair at ICDLAIR 2020 (Springer Italy), icSoftComp 2020, IEMIS 2020 (Springer), ICRITO 2020 (IEEE), ARISE-2021, FTSE-2021, and TPC members of various reputed International and National Conferences, Reviewer of International Journals like Multimedia Tools and Applications (Springer), Journal of Computer Science (Scopus Indexed), International Journal of Big Data Analytics in Healthcare (IGI Global), Journal of Renewable Energy and Environment, and Editor in various Journals. Expert Talk on Research-based topics in various Universities and Conferences in addition to guiding Research Scholars as supervisors. He has also been invited as a Judge for various events, Examiner for Reputed Universities, is a Computer Society of India Lifetime Member and also serving as Managing Committee (MC) Member, CSI Ahmedabad Chapter from 2018-2020.

Ms. Carolina Galaz Alvial
Trades Succes Coordinator and Chemistry teacher, Canada

Contextualized Science Education for Quality Learning in Trades Students

In the teaching of science and mathematics to trades students, work guides are created that are adapted to their contexts, with the purpose of bringing science and mathematics closer to their everyday lives. This generates a learning experience based on their own experiences and work environment, facilitating an increase in their understanding, and consequently, promoting a sustainable quality increase in knowledge over time.

To develop activities and work guides, a triangulation is carried out between their textbooks, the academic area, whether in science or mathematics, and the trade to which the student belongs. In this way, any abstract content in science or mathematics can be presented in a concrete and everyday manner, exemplifying theories based on the students' own experiences. This allows them to see the relevance of what they are learning, and at the same time, facilitates the assimilation of information. Each time a work guide is created, exercises are also incorporated, which, of course come with an answer sheet. Providing students with answer sheets greatly helps to reduce the students' stress when they perform these activities on their own, fostering confidence and autonomy.

For example, carpentry students handle many mathematical concepts, specifically trigonometry, these calculations are mainly focused on house construction, particularly roofs and stairs. Based on this, our examples, activities, and drawings are always oriented towards the construction field. In this way, we reinforce their learning by connecting theory with contextualized examples and work guides, and this will be, in turn, practically applied during their Carpentry shoptime.

Being trades students, they have the advantage of applying all the theory in practice. Learning by doing reinforces their knowledge and gives them the opportunity to apply

what they have learned. This active learning methodology, which is based on experience to assimilate concepts through actions, allows the student to materialize all their calculations and theoretical knowledge in practice. By connecting theory with practice and adapting the content of their theory to their work context, it contributes to quality learning that will have a lasting impact on the lives of trades students..

Biography:

Ms. Carolina Galaz Alvial is a Dynamic and versatile chemistry teacher, bilingual (Spanish-English), with five years of work experience in High School and six years in post-secondary education. Additionally, I have four years of experience in laboratory techniques in universities and organizing events (science activities, experiments, conference, presentations).

Ms. Yolanda Nxumalo
Founder and CEO of YaAzi (Pty) Ltd, South Africa

Optimizing Energy and Data Management of LoRa IoT Devices with Satellite Communication using Deep Reinforcement Learning

This study aims to improve the efficiency of LoRa Internet-of-Things (LoRa IoT) devices that communicate directly with satellites (DtS), using ambient energy management (AEM) systems and artificial intelligence (AI) techniques. LoRa IoT DtS devices enable global communication and data collection, but face challenges in energy consumption and data processing. AI can enhance data analytics and provide insights for various applications, but also poses some risks and limitations. The research methodology involves designing, implementing, and testing an AEM system that optimizes the energy consumption and transmission of LoRa IoT DtS devices using deep reinforcement learning techniques. The expected outcomes are a prototype of an AEM system that incorporates AI techniques, a set of performance metrics and indicators that measure the efficiency and effectiveness of the AI techniques, and a comparison with existing AEM systems. The findings will contribute to the development of more reliable and sustainable LoRa IoT solutions and identify the challenges and opportunities for further research and innovation in this field.

Biography:

I am the founder and CEO of YaAzi, an aviation and aerospace engineering company that aims to improve medical adherence for patients in hard-to-reach areas of South Africa by using drones for last mile logistics. Our flagship project is DADS (Digital And Drone Solution), which I co-founded with a team of engineers and researchers who are passionate about solving real-world problems with innovative solutions. You can learn more about DADS here. https://www.linkedin.com/showcase/digital-and-drone-solution-dads/?viewAsMember=true I am also a MEng Satellite Systems & Applications candidate at the French South Africa Institute of Technology (F'SATI), and an associate member of Aeronautical Society of South Africa (AeSSA). I have a BSc Mechanical & Mechatronics Engineering from University of Cape Town (UCT), and experience in radar systems, stochastic processes, and selective laser sintering. As a startup CEO and co-founder, I face many challenges and opportunities in leading and collaborating with a diverse and talented team. One of our current goals

Daniel Canseco-González

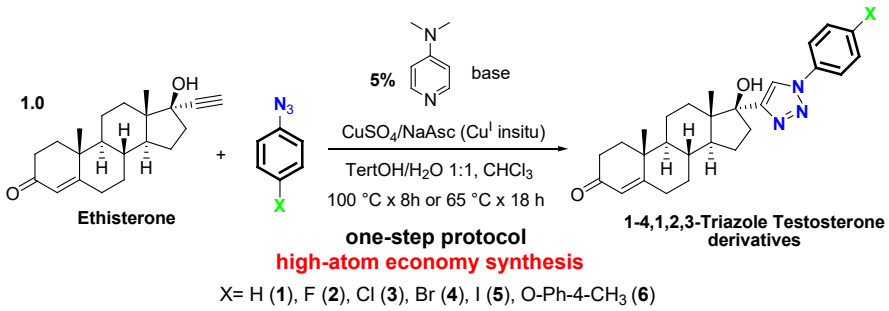
CONAHCYT-Laboratorio Nacional de Investigación y Servicio Agroalimentario y Forestal, Universidad Autónoma Chapingo, Texcoco de Mora

Facile, single step synthesis of a series of D-ring ethisterones with 1,4-1,2,3-triazoles: Preliminary evaluation of their cytotoxic activities

Cancer is a major threat to human health. There are projections showing that in 2030 or even closer will have higher rates of common malignancies with decreasing age incidence rates. Even though cancer is a multifactorial disease, they are conections between modern style of life, i.e., non-balanced human feeding, air pollution, pesticides accumulation in humans, stress, etc, among others with higher rates of these malignancies. Having this background on mind regarding of the worldwide increase in cancer as a primary problem to be solved and its cancer-related mortality.

Daniel Canseco-González, CONAHCYT-Universidad Autónoma Chapingo and colleagues have developed a series of new D-ring ethisterone substituted with 1,4-1,2,3-triazoles in a modular manner linking ethisterone as the steroidal source, which is low-cost commercial available with the corresponding 4-substituted phenyl azides (X = H (1), F (2), Cl (3), Br (4), I (5), O-Ph-4-CH3 (6)). These compounds were obtained in a quick approach and in just one synthetic step following the atom economy principles trough “click chemistry” protocols. These compounds were characterized by multinuclear-NMR, mass spectrometry, IR and unequivocally by single crystal X-ray diffraction in one case.

The cytotoxic activity of these derivatives was tested against a series of human cancer cell lines including human glioblastoma (U-251), human prostatic adenocarcinoma (PC-3), human colorectal adenocarcinoma (HCT-15), human mammary adenocarcinoma (MCF-7), human chronic myelogenous leukemia (K562), and human lung adenocarcinoma (SKLU-1). Two derivatives; compounds (3) and (5) showed promising cytotoxicity activities for leukemia adenocarcinoma (K562) and lung adenocarcinoma (SKLU). CI50% of K562: 11.72 ± 0.9 µM (3) and 24.50 ± 1.0 µM (5) and CI50% of SKLU: 14.9 ± 0.8 µM (3) and 46.0 ± 2.8 µM (5). These results open a brand new quick strategy to obtain anti-cancer compounds with good activities.



X= H (**1**), F (**2**), Cl (**3**), Br (**4**), I (**5**), O-Ph-4-CH_3 (**6**)

Biography:

Dr. Daniel Canseco González completed his PhD studies at University College Dublin-Ireland in 2013. He completed two postdoctoral studies, the first one at the Institute of Transformative Biomolecules (ITbM) located in Nagoya, Japan in 2014. He works in the fields of Organic & Organometallic Chemistry and Medicinal Chemistry as well. His research interests are; synthesis of small molecules based on "Click Chemistry reactions" and synthesis of five-membered heterocycles. Examples of this are the synthesis of antifungal compounds based on triazoles and pyrazoles and 1-4-1,2,3 steroidal triazoles, among others. He currently has 26 published articles and his publications have obtained 1124 citations so far.

is to raise funds for our software algorithm for space communication project, which will enable faster and more reliable data transmission between satellites and ground stations. This will improve the quality and efficiency of our services and products, as well as contribute to the advancement of the aviation and aerospace industry. We are looking for investors, partners, mentors, and talent who can support us in this endeavor and join our network of collaborators and stakeholders. I am always open to connect with anyone who shares our vision and values.

Ms. Farah Altarazi

Phd candidate in Industrial Engineering | Certified Project Manager, USA

AI & Data Storytelling: Empowering Data-Driven Business Decisions

In today's data-driven world, with the widespread usage of Artificial Intelligence (AI) tools and technologies in every sector, companies and businesses realize the importance of integrating these practices into their operations and processes to enhance their data-driven business decisions, such as predicting the best sale price, projecting profits, and anticipating demands.

Data visualization makes the process of utilizing available data more accessible and comprehensible. By representing complex datasets graphically, through charts, graphs, and interactive dashboards, data visualization enables businesses to gain valuable insights at a glance. It simplifies intricate patterns and trends, making it easier for stakeholders to understand the information and make informed decisions. A fundamental component of data visualization is data storytelling, which is crucial in translating visualized data into meaningful narratives. It transforms data points into relatable and persuasive narratives, making the information not only understandable but also memorable. It contextualizes the data, explaining why certain trends are significant and how they relate to broader business objectives.

In this session, we will briefly demonstrate how companies can leverage the combination of data storytelling and AI technologies. This integration enables businesses to communicate complex data insights effectively, fostering collaboration, innovation, and informed decision-making throughout the organization..

Biography:

Farah Altarazi is a Ph.D. Candidate in Industrial and Systems Engineering at The State University of New York at Binghamton. Currently, she works as a research assistant at the SUNY Research Foundation. Farah holds a B.S. in Industrial Engineering from the Jordan University of Science and

Technology and a Master's in Industrial Engineering and Management from the University of Jordan. She is a Certified Project Manager (PMP) and a Certified Supply Chain Analyst (CSCA) and has Seven years of a proven track record of preparing and implementing project plans and programs in various international non-profit organizations and companies in the United States and Jordan. Farah's research interests encompass data analysis, machine learning, simulation, optimization, sustainability, project management, and not-for-profit operations. She is an active member of the Project Management Institute (PMI), IEOM Society International, and the Jordan Engineers Association.

Mr. Duraiarasu E
Founder Elrush Tech Company, India

AI-Integrated Electronic Product Development and Its Future Scope

The convergence of artificial intelligence (AI) and electronics has ushered in a transformative era of technological innovation. This abstract explores the dynamic landscape of AI-integrated electronic product development and envisions its promising future scope. In recent years, the integration of AI with electronic products has revolutionized industries across the spectrum. From smartphones and home appliances to healthcare devices and autonomous vehicles, AI has become the driving force behind enhanced functionality, efficiency, and adaptability. This synergy has not only elevated user experiences but also expanded the boundaries of what electronic products can achieve.One of the key aspects of AI-integrated electronic product development is the ability to harness vast amounts of data for intelligent decision-making. Machine learning algorithms, neural networks, and deep learning models have empowered devices to analyze, predict, and respond to user preferences and environmental conditions in real-time. As a result, electronic products have become more intuitive, personalized, and context-aware. The future scope of AI-integrated electronic product development holds tremendous promise. Firstly, as AI technologies continue to advance, electronic products will become even more capable and versatile. The proliferation of edge computing will enable devices to process data locally, reducing latency and enhancing privacy. Moreover, the integration of AI into the Internet of Things (IoT) ecosystem will create interconnected environments where devices seamlessly communicate and collaborate, further optimizing user experiences. Additionally, AI-integrated electronic products will play a pivotal role in addressing societal challenges. As AI continues to evolve and permeate every facet of our lives, the possibilities for innovation in electronic product development are limitless, offering a future where intelligent, connected devices become indispensable components of our daily routines.

Biography:

Duraiarsau E is an accomplished undergraduate scholar hailing from Rajalakshmi Engineer College in Chennai. As a versatile individual, he's made significant contributions to the world of electronics and AI integration. Duraiarsau is not only an esteemed author for Electronics For You magazine, but he also clinched the title of Electronics Design Champion in the prestigious 2022 EFY competition. In 2023, Duraiarsau achieved a remarkable feat by emerging victorious in the IEEE SAC Region 10 UGP Contest, a highly competitive Asian-level event. He is the visionary founder and managing director of Elrush Tech Company, a startup at the forefront of developing affordable hardware devices infused with AI to address pressing societal issues.Duraiarsau's dedication to the field of engineering is evident through his involvement in the International Conference on EV Sustainability and Mobility, organized by IITGN in 2022. His work there played a crucial role in shaping government standards for electric vehicles. Notably, his groundbreaking research on biosensors earned him recognition in Electronics For You magazine. With a promising future ahead, Duraiarsau E continues to be a driving force in the world of electronics and technology innovation.

Dr. Daniel Canseco G
Researcher, Mexico

Facile, single step synthesis of a series of D-ring ethisterones with 1,4-1,2,3-triazoles: Preliminary evaluation of their cytotoxic activities.

Daniel Canseco-González [A]*, David Morales-Morales [B], Alejandro Dorazco-González [B]*, Jorge Ali-Torres [C]

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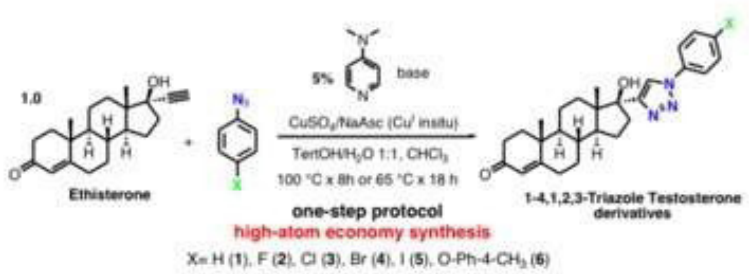
PhD. Daniel Canseco-González

Abstract: Cancer is a major threat to human health. There are projections showing that in 2030 or even closer will have higher rates of common malignancies with decreasing age incidence rates. Even though cancer is a multifactorial disease, they are conections between modern style of life, i.e., non-balanced human feeding, air pollution, pesticides accumulation in humans, stress, etc, among others with higher rates of these malignancies. Having this background on mind regarding of the worldwide increase in cancer as a primary problem to be solved and its cancer-related mortality.

Daniel Canseco-González, CONAHCYT-Universidad Autónoma Chapingo and colleagues have developed a series of new D-ring ethisterone substituted with 1,4-1,2,3-triazoles in a modular manner linking ethisterone as the steroidal source, which is low-cost commercial available with the corresponding 4-substituted phenyl azides (X = H (**1**), F (**2**), Cl (**3**), Br (**4**), I (**5**), O-Ph-4-CH_3 (**6**)). These compounds were obtained in ***a quick approach and in just one synthetic step*** following the *atom economy principles* trough "click chemistry" protocols. These compounds were characterized by multinuclear-NMR, mass spectrometry, IR and unequivocally by single crystal X-ray diffraction in one case.

The cytotoxic activity of these derivatives was tested against a series of human cancer cell lines including human glioblastoma (**U-251**), human prostatic adenocarcinoma (**PC-3**), human colorectal adenocarcinoma (**HCT-15**), human mammary adenocarcinoma (**MCF-7**), human chronic myelogenous leukemia (**K562**), and human lung adenocarcinoma (**SKLU-1**). Two derivatives; compounds (**3**) and (**5**) showed ***promising cytotoxicity activities*** for leukemia adenocarcinoma (**K562**) and lung adenocarcinoma (**SKLU**). $CI_{50\%}$ of **K562**: 11.72 ± 0.9 µM (**3**) and 24.50 ± 1.0 µM (**5**) and $CI_{50\%}$ of **SKLU**: 14.9 ± 0.8 µM (**3**) and 46.0 ± 2.8 µM (**5**). These results open a brand new quick strategy to obtain anti-cancer compounds with good activities.



Biography:

Highly trained synthetic chemist in organic and organometallic fields with more than 12 years experience in academia or industry either. Also, I have strong background in analytical chemistry developing and researching new methodologies on UPLC- mass spectrometry and other chromatography techniques. I have been trained in Mexico and overseas as well. I have obtained 23 international publications related to different fields of chemistry, mainly in organic and organometallic chemistry, material science and medicinal chemistry.

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