

HAZEL GROUP

FINAL  
PROGRAM

Global Conference on

# CATALYSIS & APPLIED CHEMICAL ENGINEERING

August 12-13, 2021 | Webinar

GCC  
2021

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# FINAL AGENDA

DAY - 1 AUGUST 12, 2021 (THURSDAY)

09:00-09:30 Introduction

## KEYNOTE PRESENTATIONS

- 09:30 - 10:15 **TITLE: REACTION KINETICS IN CHEMICAL ENGINEERING**  
**Christo Boyanov Boyadjiev**, Institute of Chemical Engineering,  
Bulgarian Academy of Sciences, Bulgaria
- 10:15 - 11:00 **TITLE: SYNTHESIS, CHARACTERIZATION AND EVALUATION OF ANTI-TUBERCULOSIS, ANTI-HIV, AND ANTIMICROBIAL ACTIVITIES OF CERTAIN HETEROCYCLIC COMPOUNDS, DERIVED FROM SPIRO-ISOXAZOLINE, TRIAZOLE,**  
**Anouar Alami**, Sidi Mohammed Ben Abdellah University, Morocco
- 11:00 - 11:45 **TITLE: UTILIZATION OF PHOTOSYNTHETIC MICROALGAE FOR THE TREATMENT OF HIGH NITROGEN WASTEWATERS**  
**Petros Samaras**, International Hellenic University, Greece
- 11:45 - 12:00

## ORAL SESSION I

**Sessions 1:** Material Science & Chemical Engineering, Organometallics, Organocatalysis & Bioinorganic Chemistry, Industrial & Engineering Catalysis, Catalysis & Pyrolysis, Material Science & Chemistry, Fluid Dynamics & Kinematics, Environmental Catalysis, Catalysis & Polymer Engineering

- 12:00 - 12:30 **TITLE: TEXTURED ARTIFICIAL JOINTS FOR IMPROVED TRIBOLOGICAL PERFORMANCE**  
**Jufan Zhang**, University College Dublin, Ireland
- 12:30 - 13:00 **TITLE: FROM BIFUNCTIONAL CATALYSIS TO TANDEM REACTIONS USING TRANSITION METAL N-HETEROCYCLIC CARBENE COMPLEXES: A MECHANISTIC PERSPECTIVE**  
**Prasenjit Ghosh**, Indian Institute of Technology Bombay, India

13:00 - 13:30

TITLE: INVESTIGATION OF COBALT OXIDE-BASED THIN FILMS DEPOSITED BY COLD PLASMA ON STRUCTURED SUPPORTS AS PROMISING CATALYSTS FOR CO<sub>2</sub> METHANATION

**Nilofar Mohammadpour**, Lodz university of technology, Poland

13:30 - 14:00

TITLE: SYNTHESIS AND CHARACTERIZATION OF SELECTED SOUTH AFRICAN KAOLIN DEPOSIT FOR CATALYTIC PYROLYSIS OF MUNICIPAL PLASTIC WASTE

**Olusegun Ayodeji Olagunju**, Durban University of Technology, South Africa

14:00 - 14:30

TITLE: NEW INNINGS OF M-TYPE STRONTIUM HEXAFERRITE SHEETS AS AN EFFICIENT MICROWAVE CATALYST

**Sandhya Mishra**, Indian Institute of Technology Patna, India

14:30 - 15:00

TITLE: G-C<sub>3</sub>N<sub>4</sub> PASSIVATED CA-DOPED NANB<sub>2</sub>O<sub>3</sub> HETEROJUNCTION FOR EFFICIENT PHOTOCATALYSIS

**Aayush Gupta**, GLA University, India

15:00 - 15:30

TITLE: SCALE-UP STRATEGIES FOR PRODUCTION OF BIOFUEL AND ACTIVE PHARMACEUTICAL INGREDIENTS IN MICROREACTORS

**Harrison S Santana**, University of Campinas, Brazil

15:30 - 16:00

TITLE: COMPUTATION-AIDED DEVELOPMENTS OF HIGHLY DURABLE AND ACTIVE PHOTOANODE FOR ENHANCED SOLAR ENERGY CONVERSION TO HYDROGEN

**Heechae Choi**, University of Cologne, Germany

16:00 - 16:30

TITLE: INTERPRETATION AND EVOLUTION OF OPEN-CIRCUIT VOLTAGE, RECOMBINATION, IDEALITY FACTOR AND SUBGAP DEFECT STATES DURING REVERSIBLE LIGHT-SOAKING AND IRREVERSIBLE DEGRADATION OF PEROVSKITE SOLAR CELLS

**Pankaj Yadav**, Pandit Deendayal Energy University, India

16:30 - 17:00

TITLE: REALIZATION OF SWITCHING MECHANISM OF CO<sub>2</sub> BY ALKALINE ADATOMS ON G-B<sub>4</sub>N<sub>3</sub> SURFACE

**Shivam Kansara**, Kadi Sarva Vishwavidyalaya, India

17:00 - 17:30

**TITLE: SYNTHESIS OF SULPHONIC ACID FUNCTIONALIZED CORE-SHELL MAGNETIC MESOPOROUS SILICA ADSORBENT**

**Syed Mazhar Shah**, University of Engineering & Technology  
Lahore (Gujranwala Campus), Pakistan

END OF DAY I

DAY - 2 AUGUST 13, 2021 (FRIDAY)

KEYNOTE PRESENTATION II

09:15 - 10:00

**TITLE: STRATEGIES FOR THE MOLECULAR ENGINEERING OF METAL OXIDES HETEROSTRUCTURES FOR ENHANCED PHOTOCATALYTIC ACTIVITY**

**K. Byrappa**, Adichunchanagiri University, India

10:00 - 10:45

**TITLE: HIGHLY SELECTIVE CATALYSTS FOR OXIDATIVE DEHYDROGENATION OF PROPANE**

**Shakeel Ahmed**, King Fahd University of Petroleum & Minerals,  
Saudi Arabia

10:45 - 11:00 Break Time

ORAL PRESENTATION II

**Sessions 2 :** Chemical Kinetics And Catalysis, Photocatalysis, Molecular Catalysis, Catalysis & Chemical Reaction Engineering, Chemistry In Nanotechnology, Biocatalysis And Green Chemistry, Catalytic Materials & Mechanisms, Chemistry In Nanotechnology, Electro & Autocatalysis

11:00 - 11:30

**TITLE: CARBON DIOXIDE RECYCLING TO USEFUL CHEMICAL PRODUCTS**

**Venko Beschkov**, Bulgarian Academy of Sciences, Bulgaria

11:30 - 12:00

**TITLE: COPPER-CATALYZED C-S COUPLING OF CHIRAL QUATERNARY AMMONIUM SALTS FOR SYNTHESIS OF CHIRAL ORGANOSULFUR COMPOUNDS**

**Qingle Zeng**, Chengdu University of Technology, China

12:00 - 12:30

TITLE: ISOLATION AND CHARACTERIZATION OF GREEN CELLOULOSE NANOFIBERS FOR REMOVAL OF ORGANIC CONTAMINANTS IN WASTEWATER

**Zikhona Tywabi-Ngeva**, Nelson Mandela University, South Africa

12:30 - 13:00

TITLE: SYNTHESIS AND OXIDATION CATALYSIS OF MOLECULAR FLUOROVANADATES

**Yuji Kikukawa**, Kanazawa University, Japan

13:00-13:30

TITLE: DEVELOPMENT OF A NOVEL BINARY NITRATE-BASED NANOCOMPOSITE INDUCED WITH MXENE NANOMATERIAL FOR ENERGY STORAGE APPLICATIONS

**Navid Aslfattahi**, University of Malaya, Malaysia

13:30-14:00

TITLE: AN EXTREMELY ENERGY-SAVING ELECTROCATALYSIS OF HYDRAZINE FOR HYDROGEN GENERATION

**Pingyu Wan**, Beijing University of Chemical Technology, China

14:00-14:30

TITLE: A NOVEL DESIGN OF CATALYST LAYER INTEGRATED WITH SOLID ELECTROLYTE IN THE METAL-O<sub>2</sub> BATTERY

**Yuan-Cheng Cao**, Huazhong University of Science and Technology (HUST), China

14:30-15:00

TITLE: ADVANCED MICROSCOPIC ANALYSIS OF A SRI LANKAN ANTHILL CLAY VARIETY FOR THE INVESTIGATION OF INDUSTRIALLY DEMANDED CHARACTERISTICS

**Suresh Aluvihara**, University of Peradeniya, Sri Lanka

15:00-15:30

TITLE: LIQUID DROPLET IMBIBITION INTO A THIN COATING LAYER: DIRECT PORE-SCALE MODELING AND EXPERIMENTAL OBSERVATIONS

**Hamed Aslannejad**, Utrecht University, Netherlands

15:30 - 16:00

TITLE: WATER REMEDIATION BY CHEMICAL REDUCTION FOLLOWED BY IN SITU LAYERED DOUBLED HYDROXIDES

Xiao Jin Yang, Beijing University of Chemical Technology, China

16:00 - 16:30

TITLE: PHYSICOCHEMICAL PARAMETERS AND HEAVY METALS ANALYSIS OF OIL POLLUTED GROUND WATER IN BARUWA COMMUNITY

Temitope OM, Federal University of Technology Akure, Nigeria

16:30 - 17:00

TITLE: SURFACE ENHANCED INFRARED ABSORPTION SPECTROSCOPY OF SOME SELECTED SURFACE ACTIVE AGENTS AND THEIR APPLICATIONS

Ramsingh Kurrey, Pt. Ravishankar Shukla University Raipur, India

17:00 - 17:30

TITLE: OSCILLATORY MEMBRANE FILTRATION FOR THE SEPARATION OF OIL DROPS FROM PRODUCED WATER

Asmat Ullah, University of Engineering & Technology Peshawar, Pakistan

END NOTE, CLOSING CEREMONY

Bookmark Your dates from  
December 06-08, 2021

Looking forward to See you in  
**Dubai !!!**

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