

Pacificchem 2025

First round symposia

- Opening Future in Triggered Assembling Functional Supramolecular Coordination Compounds
- Design and Applications of Redox Active Ligands
- Frontier and Perspectives of Molecule-Based Magnets
- The Phthalocyanine Renaissance
- Metal-oxo Clusters: From Fundamental Science to Applications
- Second Coordination Sphere Designs and Strategies for Molecular Catalysis
- Accessing New Targets with Medicinal Inorganic Chemistry
- Alkali Metal and Alkaline Earth Chemistry - Developments, Applications & Challenges
- Straying away from the Main line: Unusual properties and reactivity of main group elements
- Frontiers and New Horizons in Molecular f-Element Chemistry
- Frontiers in Actinide Chemistry: From Fundamental Systems to Practical Applications
- Cutting Edge of Hemeprotein Science
- Novel Heme Proteins and Model Systems
- Metals in Biological Chemistry. Metal-binding Active Oxygen Species Correlated to Sustainable Development Goals
- Harnessing the Potential of Small Molecules: Exploring Metalloenzymes and Adaptation in Synthetic Catalysts
- Frontiers of inorganic materials synergistically functionalized by chemical designs with multiple components for energy and environmental applications
- Hypervalent iodine: bonding, mechanism and synthetic applications
- Diversity in Inorganic Fluorine Chemistry, from Fundamental to Applied Aspects, to Address Global Challenges
- Late Transition Metal Complexes and Clusters: Novel Structures and Transformations
- Early Transition Metal Complexes: From Rare Bond Types to Useful Catalysis
- Photoactive Transition Metal Complexes for Organic and Supramolecular Transformations
- Luminescent Nanostructures for Biosensing, Bioimaging and Medicine
- Application of luminescent materials for ionizing radiation detection
- Trilateral Collaboration to Advance Sustainable Energy using Nature-inspired Variable-Property Materials
- Recent Evolution of Single-atom Catalysts in Heterogeneous Catalysis
- Multicomponent Nanostructures: Novel Synthesis, Rational Design, and Materials Discovery
- Diamond Electrochemistry
- Wettability and Adhesion
- Photo Polypeptide Folding and Assembly for the Materials Design and Therapeutic Applications - functional molecular nanosystems: fundamentals, applications, and innovations
- Supramolecular Assemblies at Surfaces: Nanopatterning, Functionality, Reactivity
- Free Radical and Spin-Based Functional Materials
- Nanostructured Oxides for Energy Harvesting, Conversion and Storage
- Advances in plastic crystals
- Science and Application in Molecular Charge-Transfer Complexes
- Dynamic Exciton: Manipulation of Local-Excited, Charge-Transfer, and Charge-Separated States for Energy Conversion

- Recent Progress in Circularly Polarized Luminescence (CPL) and Applications
- Carbon nanotubes and related low-dimensional materials: Preparation, Characterization and Applications
- Dynamics polar induced by electrons, protons, ions, and dipoles: its architect, capture, and manipulation.
- Clays and clay-inspired nanomaterials for emergent applications
- Fusion of Chemistry, Engineering, and Design toward a Circular Economy for a Sustainable Future
- Carbonaceous Products in Chemistry

Second round symposia

- Handling hydrogen at scale: Materials-based hydrogen carriers
- Advances in Catalysis for Environmentally Friendly Fuels and Chemicals Production from Alternative Resources
- Exploring Nano-Bio Interactions in Materials, Medicine, and the Environment
- Hydrogen Materials for Energy Storage
- Machine learning-based accelerated discovery of advanced materials in support of green energy transition
- Photoactive Transition Metal Complexes for Capture and Photoactivation of Small Molecules
- Molecular Spin Qubits Toward Quantum Computer
- Towards A Circular Materials Economy: Design for Renewable, Degradable and Recyclable Polymers
- Challenges for Artificial Photosynthesis: Regulating Organic-Inorganic Functional Interfaces for Disruptive Solar Fuels Research

Technical gaps

- Molecular switches and machines
- Polymer catalysis
- Solid-state electrolytes for battery and fuel cell applications
- Supramolecular chemistry w/ inorganic flavor
- Organic-inorganic hybrid materials
- Ammonia for energy applications
- Main group compounds mimicking transition metal catalysts
- Synthetic and Structural Advances in Solid State Chemistry
- Mechanistic inorganic chemistry