



Keywords Please select from the list below all keywords that apply to your manuscript. If possible, please select at least one keyword from each of the first three categories: *Audience*, *Domain*, *Pedagogy*. Also select at least two, up to a maximum of eight keywords from the *Topics* category.

MS Number

We realize that you selected keywords at the time you submitted your manuscript. This list differs significantly from the list you used at that time. The *JCE* staff carefully revised the list of keywords to make it more comprehensive and useful, and then the list was evaluated by a select group of *JCE* reviewers, whose suggestions were incorporated. The result is the list you see below. It has been divided into categories, it contains a greater total number of keywords than the earlier list, and some of the earlier keywords have been eliminated. During our transition to the new list, we request that those whose manuscripts were submitted under the old list update their selections of keywords. The new keywords will be used in the *JCE* Index online and in the retrieval system of the National Science Digital Library.

Definitions of all keywords are available at <http://resgenchem14.chem.wisc.edu/jcedl/subject/TermDefs.html>

• **Audience (please select at least 1)**

- | | | |
|---|---|--|
| <input type="checkbox"/> General Public | <input type="checkbox"/> First-Year Undergraduate / General | <input type="checkbox"/> Graduate Education / Research |
| <input type="checkbox"/> Elementary / Middle School Science | <input type="checkbox"/> Second-Year Undergraduate | <input type="checkbox"/> Continuing Education |
| <input type="checkbox"/> High School / Introductory Chemistry | <input type="checkbox"/> Upper-Division Undergraduate | |

• **Domain (please select at least 1)**

- | | | |
|--|--|--|
| <input type="checkbox"/> Analytical Chemistry | <input type="checkbox"/> Demonstrations | <input type="checkbox"/> Organic Chemistry |
| <input type="checkbox"/> Biochemistry | <input type="checkbox"/> Environmental Chemistry | <input type="checkbox"/> Physical Chemistry |
| <input type="checkbox"/> Chemical Education Research | <input type="checkbox"/> History / Philosophy | <input type="checkbox"/> Polymer Chemistry |
| <input type="checkbox"/> Chemical Engineering | <input type="checkbox"/> Inorganic Chemistry | <input type="checkbox"/> Public Understanding / Outreach |
| <input type="checkbox"/> Chemoinformatics | <input type="checkbox"/> Interdisciplinary / Multidisciplinary | <input type="checkbox"/> Safety / Hazards |
| <input type="checkbox"/> Curriculum | <input type="checkbox"/> Laboratory Instruction | |

• **Pedagogy (please select at least 1 if possible)**

- | | | |
|---|---|--|
| <input type="checkbox"/> Analogies / Transfer | <input type="checkbox"/> Hands-On Learning / Manipulatives | <input type="checkbox"/> Mnemonics / Rote Learning |
| <input type="checkbox"/> Calculator-Based Learning | <input type="checkbox"/> Humor / Puzzles / Games | <input type="checkbox"/> Multimedia-Based Learning |
| <input type="checkbox"/> Collaborative / Cooperative Learning | <input type="checkbox"/> Inquiry-Based / Discovery Learning | <input type="checkbox"/> Problem Solving / Decision Making |
| <input type="checkbox"/> Communication / Writing | <input type="checkbox"/> Internet / Web-Based Learning | <input type="checkbox"/> Testing / Assessment |
| <input type="checkbox"/> Computer-Based Learning | <input type="checkbox"/> Misconceptions / Discrepant Events | <input type="checkbox"/> Textbooks / Reference Books |
| <input type="checkbox"/> Distance Learning / Self Instruction | | |

• **Topics (please select at least 2, maximum of 8)**

- | | | |
|--|--|--|
| <input type="checkbox"/> Acids / Bases | <input type="checkbox"/> Atomic Properties / Structure | <input type="checkbox"/> Chemometrics |
| <input type="checkbox"/> Addition Reactions | <input type="checkbox"/> Atomic Spectroscopy | <input type="checkbox"/> Chirality / Optical Isomers |
| <input type="checkbox"/> Administrative Issues | <input type="checkbox"/> Bioanalytical Chemistry | <input type="checkbox"/> Chromatography |
| <input type="checkbox"/> Agricultural Chemistry | <input type="checkbox"/> Bioenergetics | <input type="checkbox"/> Colloids |
| <input type="checkbox"/> Alcohols | <input type="checkbox"/> Bioinorganic Chemistry | <input type="checkbox"/> Combinatorial Chemistry |
| <input type="checkbox"/> Aldehydes / Ketones | <input type="checkbox"/> Biological Cells | <input type="checkbox"/> Computational Chemistry |
| <input type="checkbox"/> Alkanes / Cycloalkanes | <input type="checkbox"/> Bioorganic Chemistry | <input type="checkbox"/> Conductivity |
| <input type="checkbox"/> Alkenes | <input type="checkbox"/> Biophysical Chemistry | <input type="checkbox"/> Conferences |
| <input type="checkbox"/> Alkylation | <input type="checkbox"/> Biosignaling | <input type="checkbox"/> Conformational Analysis |
| <input type="checkbox"/> Alkynes | <input type="checkbox"/> Biosynthesis | <input type="checkbox"/> Constitutional Isomers |
| <input type="checkbox"/> Amides | <input type="checkbox"/> Biotechnology | <input type="checkbox"/> Constructivism |
| <input type="checkbox"/> Amines / Ammonium Compounds | <input type="checkbox"/> Brønsted-Lowry Acids / Bases | <input type="checkbox"/> Consumer Chemistry |
| <input type="checkbox"/> Amino Acids | <input type="checkbox"/> Calibration | <input type="checkbox"/> Coordination Compounds |
| <input type="checkbox"/> Applications of Chemistry | <input type="checkbox"/> Calorimetry / Thermochemistry | <input type="checkbox"/> Covalent Bonding |
| <input type="checkbox"/> Aqueous Solution Chemistry | <input type="checkbox"/> Carbocations | <input type="checkbox"/> Crystal Field / Ligand Field Theory |
| <input type="checkbox"/> Aromatic Compounds | <input type="checkbox"/> Carbohydrates | <input type="checkbox"/> Crystals / Crystallography |
| <input type="checkbox"/> Astrochemistry | <input type="checkbox"/> Carboxylic Acids | <input type="checkbox"/> Descriptive Chemistry |
| <input type="checkbox"/> Asymmetric Synthesis | <input type="checkbox"/> Catalysis | <input type="checkbox"/> Diastereomers |
| <input type="checkbox"/> Atmospheric Chemistry | <input type="checkbox"/> Chemical Technicians | <input type="checkbox"/> Drugs / Pharmaceuticals |

continued, over

Ms Keyword List
6/29/2004



• **Topics (please select at least 2, maximum of 8) (continued)**

- Dyes / Pigments
- Electrochemistry
- Electrolytic / Galvanic Cells / Potentials
- Electrophilic Substitution
- Electrophoresis
- Elimination Reactions
- Enantiomers
- Enrichment / Review Materials
- Enzymes
- Epoxides
- EPR / ESR Spectroscopy
- Equilibrium
- Esters
- Ethers
- Ethics
- Fatty Acids
- Fluorescence Spectrometry
- Food Science
- Forensic Chemistry
- Fourier Transform Techniques
- Free Radicals
- Gas Chromatography
- Gases
- Geochemistry
- Glycolysis
- Gravimetric Analysis
- Green Chemistry
- Grignard Reagents
- Group Theory / Symmetry
- Heat Capacity
- Heterocycles
- Hormones
- HPLC
- Hydrogen Bonding
- Industrial Chemistry
- Inner Transition Elements
- Instrumental Methods
- Ion Exchange
- Ion Selective Electrodes
- Ionic Bonding
- IR Spectroscopy
- Isotopes
- Kinetic-Molecular Theory
- Kinetics
- Laboratory Computing / Interfacing
- Laboratory Equipment / Apparatus
- Laboratory Management
- Lasers
- Learning Theories
- Lewis Acids / Bases
- Lewis Structures
- Lipids
- Liquids
- Magnetic Properties
- Main-Group Elements
- Mass Spectrometry
- Materials Science
- Mathematics / Symbolic Mathematics
- Mechanisms of Reactions
- Medicinal Chemistry
- Membranes
- Metabolism
- Metallic Bonding
- Metalloids / Semimetals
- Metallurgy
- Metals
- Micelles
- Microscale Lab
- Minorities in Chemistry
- MO Theory
- Molecular Biology
- Molecular Mechanics / Dynamics
- Molecular Modeling
- Molecular Properties / Structure
- Molecular Recognition
- Nanotechnology
- Natural Products
- NMR Spectroscopy
- Nomenclature / Units / Symbols
- Noncovalent Interactions
- Nonmajor Courses
- Nonmetals
- Nuclear / Radiochemistry
- Nucleic Acids / DNA / RNA
- Nucleophilic Substitution
- Nutrition
- Organometallics
- Organosulfur Compounds
- Oxidation / Reduction
- Oxidation State
- Periodicity / Periodic Table
- pH
- Phases / Phase Transitions / Diagrams
- Phenols
- Photochemistry
- Photosynthesis
- Physical Properties
- Plant Chemistry
- Polymerization
- Potentiometry
- Precipitation / Solubility
- Professional Development
- Proteins / Peptides
- Qualitative Analysis
- Quantitative Analysis
- Quantum Chemistry
- Raman Spectroscopy
- Rate Law
- Reactions
- Reactive Intermediates
- Receptors
- Resonance Theory
- Semiconductors
- Separation Science
- Solid State Chemistry
- Solids
- Solutions / Solvents
- Spectroscopy
- Standards National / State
- Statistical Mechanics
- Stereochemistry
- Steroids
- Stoichiometry
- Student / Career Counseling
- Student-Centered Learning
- Superconductivity
- Surface Science
- Synthesis
- TA Training / Orientation
- Theoretical Chemistry
- Thermal Analysis
- Thermodynamics
- Thin Layer Chromatography
- Titration / Volumetric Analysis
- Toxicology
- Transition Elements
- Transport Properties
- Undergraduate Research
- UV-Vis Spectroscopy
- Valence Bond Theory
- Vitamins
- VSEPR Theory
- Water / Water Chemistry
- Women in Chemistry
- X-ray Crystallography