

1. General Information

The European Journal of Inorganic Chemistry (EurJIC) is published twice monthly.

Manuscripts should be submitted online using our online submission service at http://www.manuscriptXpress.org. You should prepare a single file containing all tables, graphics, supporting information (where appropriate) etc. Acceptable file formats are Microsoft Word, Rich Text Format, Postscript and PDF. Avoid the use of page breaks even between the title page and the introduction. If graphics are included at the end of the manuscript, try to fit as many as possible onto a single page. The file should have margins of 2 cm and be 1.5-line spaced.

Authors can follow the progress of their manuscript on their personal homepage, which is created automatically upon initial registration. This homepage is the same for the family of Wiley-VCH European journals and can be used to store the latest version of a submitted paper and to upload the document file after acceptance. Your referee reports for the family of Wiley-VCH European journals are also archived here.

No paper copies of the manuscript are required when using this system.

- The author must inform the editor of all manuscripts submitted, soon to be submitted, or in press at other journals that have a bearing on the manuscript being submitted.
- The correspondence author of a Microreview will receive a complimentary copy of the journal along with a PDF file of his/her paper restricted to 50 printouts; the correspondence author of other articles will receive a PDF file restricted to 25 printouts. Colour figures can be reproduced. Unless essential for the understanding of a paper, authors will be requested to make a contribution towards the costs of colour reproduction. Details will be provided after acceptance of the manuscript.
- We encourage authors to submit pictures for the cover page. A
 template of our cover page, eurjiccover.pdf, can be reached by
 clicking the link "For Authors" on our journal homepage (http://
 www.eurjic.org), to help you visualize the final effect of your design.

IMPORTANT: Any manuscript already available on personal/group web pages will be considered by the editors as already published and will not be accepted.

2. Types of Contributions

EurJIC publishes articles on inorganic, organometallic, bioinorganic, physical inorganic and solid-state chemistry. All contributions undergo peer review. An author may appeal against the decision on his/her manuscript, in writing. Three types of contributions are accepted for publication:

- Full Papers are articles with an Experimental Section that describe a significant contribution to the development of an area of research of importance. There are no restrictions placed on the length of a Full Paper.
- Short Communications are brief reports on results of high significance and urgency. Generally, they are no longer than 12–16 double-spaced pages or 3–4 typeset pages. An Experimental Section (as a separate paragraph or as part of the references) is desirable; if it is not included in the paper, the experimental data should be submitted as Supporting Information for refereeing purposes, and marked as such. A justification for urgent publication should accompany submission.
- A Microreview introduces the reader to a particular area of an author's research through a concise overview of a selected topic. As a rule, Microreviews are written on invitation, although unsolicited articles are also welcome. It is recommended, however, to contact the editor before submitting an unsolicited Microreview. The content should balance scope with depth; it should be a focused review of 25–30 double-spaced pages or 6–8 typeset pages. Reference to important work from others that is significant to the topic should be included. Microreviews will be refereed but will have no Experimental Section.

3. Manuscript Preparation

3.1 General

The whole of the manuscript should be 1.5-line spaced and in a large script (Times New Roman, 12 pt). We recommend that you prepare your text with Microsoft Word (PC or Macintosh versions) (see Section 3.2). Use the automatic pagination function incorporated in your word processor to number the pages; do not insert page numbers by hand. Leave a 2-cm margin around the perimeter of each page. The figures, schemes and graphical abstract in the accepted version should be camera-ready. Consult a current issue of the journal for an overview of the format. A manuscript should comprise: \square Title Page \square Keywords \square Abstract \square Main Text including Introduction, Results and Discussion etc. \square Experimental Section \square Acknowledgments (optional) \square Captions \square Tables \square References \square Schemes and Figures \square Graphical Abstract. \square For Microreviews only: Biographical sketches and a portrait-quality photograph of all authors.

3.2 Text

The text should be typed with carriage returns (hard returns) only at the end of a paragraph, title, heading and similar features. Avoid end-of-line word divisions.

Abbreviations and acronyms should be used sparingly and consistently. Where they first appear in the text, the complete term — apart from the most common ones such as NMR, IR, THF, *t*Bu etc. — should also be given.

In the Experimental Section, quantities of reactants, solvents etc. should be included in parentheses [e.g. A solution of triphenylphosphane (500 mg, 1.91 mmol) in dichloromethane (15 mL) was added to.....].

NMR spectroscopic data should be quoted as in the following example: 1 H NMR (300 MHz, $C_{6}D_{6}$, 25 $^{\circ}$ C): $\delta = 1.3$ (s, 18 H, SiMe₃), 0.9 (d, $^{3}J_{\rm H,H} = 5.7$ Hz, 2 H, 2-H) ppm. For each chemical shift, additional information should be given in the order: multiplicity, coupling constant, number of protons, assignment. The NMR data of different nuclei should be listed in ascending order of atomic weight (e.g. 1 H, 13 C, 19 F, 29 Si.....).

The purity of all new compounds should be verified by elemental analysis to an accuracy within $\pm 0.4\%$. In special cases, for instance when the compound is unstable or not available in sufficient quantities for complete analysis, the exact relative molecular mass obtained from a high-resolution mass spectrum and a clean 13 C NMR spectrum (as additional material for inspection by the referees) should be supplied.

Symbols of physical quantities, but not their units (e.g. T for temperature, J, a), stereochemical information (cis, trans, Z, R), locants (N-methyl), symmetry and space groups ($P2_1/c$), and prefixes in formulas or compound names (tBu, tert-butyl) **must be in italics**. Latin phrases, such as "in situ", should not.

Stereochemical descriptors, such as D- and L-, and molar (M) or normal (N) should be in small capitals.

Use character formatting for italic and bold characters. Avoid any *special style sheets* to format these features. Write *capital letters* using the keyboard (shift + letter key), **not** the format "Capital letter" in Word.

Use only characters from the Symbol and Normal Text character sets, especially when inserting Greek letters and characters with umlauts, accents, tildes, etc.: α , Å, ã, ä, à.

There are three types of hyphens: normal dashes (-), en dashes (-), and em dashes (—). Use these as illustrated — spacing is important too — in the following examples:

well-known reaction	C-H bond	
six-membered ring	Tables 2-4	
3-position of the ring	carbon-oxygen bond	
signal-to-noise ratio	C-N stretch	
$Mo-K_a$	Diels-Alder reaction	
1,2-dicyanobutane	structure-activity relationship	
<i>p-tert</i> -butylphenol	80-100 mg	
(−)-tartaric acid	carried out at −10°C	
$[M^+ - CH_3]$	cm^{-1}	

Use the symbol \times where appropriate, rather than the letter x: ... washed with water (2 \times 150 mL) ...

Use the double quotation marks "..." rather than ",...", "..." or «...»

Graphics (including structural formulas, schemes, figures, equations and small graphical items that appear in captions) must be submitted camera-ready on separate pages after acceptance of the manuscript (see Section 3.5).

Lines or arcs, for example to indicate ring compounds, cannot be used within the text. Another method for indicating such compounds must be devised. Please contact the Editorial Office if any help is needed.

If practical, authors should use a systematic name (IUPAC or Chemical Abstracts) for each title compound in the Experimental Section. Please try to avoid complicated, multi-line names if a simpler version (e.g. alcohol 4, ketone 5, compound 6) could be used instead.

3.3 Tables

Use the Insert Table command from the Table menu or use the Insert Table button on the Standard toolbar for creating tables, and use tabs ONLY to move between cells.

3.4 References

We strongly recommend the use of the Endnotes feature of Word. If you prefer not to use this function, references should be indicated by numbers in square brackets as superscripts and, if applicable, after punctuation (example: text.^[1]). Use the Format Font menu.

Journal titles should be abbreviated according to the Chemical Abstracts Service Source Index (CASSI).

The Author is responsible for correct citations. The *European Journal* of *Inorganic Chemistry* is a member of Cross Ref. (http://www.crossref.org), a service which links reference citations to the online content that those references cite. This can only function if the citations are accurate. Please ensure that only one reference is cited under each reference number or that a composite reference is subdivided into parts a), b) etc. For example:

[1] A. Einstein, A. N. Other, Eur. J. Inorg. Chem. 2003, 1–15. [2] R. Schoenfeld, The Chemist's English, 3rd ed., VCH, Weinheim, 1990, p. 111.

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[1] a) A. Einstein, A. N. Other, Eur. J. Inorg. Chem. 2003, 1-15; b) R. Schoenfeld, The Chemist's English, 3rd ed., VCH, Weinheim, 1990, p. 111.

but not

[1] a) A. Einstein, A. N. Other, Eur. J. Inorg. Chem. 2003, 1-15; R. Schoenfeld, The Chemist's English, 3rd ed., VCH, Weinheim, 1990, p. 111.

3.5 Graphics

Graphics are schemes, figures, equations and small graphical items that appear in captions. Graphics differ fundamentally from the text portion of your manuscript in that they must be scanned or electronically processed.

In the revised version please submit **each graphic in its own file** within a graphic folder. The following formats are preferred: *.cdr, *.cdx, *.wmf (windows metafile), *.pct, *.tif, *.eps. For good reproduction the resolution should be a minimum of 300 dpi. Consult the following table for the appropriate size of lettering. Lettering smaller than 3.0 mm will reproduce poorly. Please use only one size of lettering per graphic and a font like Times New Roman, which distinguishes between 1 (small L) as in HCl (hydrochloric acid) and I (capital i) as in HCl (iodocarbene).

Table 1. Guide for preparing graphics

Letter Size	Font	Maximum Graphic Width ^[a]	
		1-Column Format	2-Column Format
	Times New Roman		
3.0 mm	12	13 cm	26 cm
3.5 mm	14	15 cm ^[b]	_
4.0 mm	16	17 cm ^[b]	_
4.5 mm	18	19 cm	_

[a] Most graphics are in 1-column format. [b] We prefer lettering of 3.5 or 4.0 mm with maximum graphic widths of 15 or 17 cm, respectively.

The settings for one-column graphics constructed with Chem Draw can be found in the template **eurjourn.zip**, which can be reached by clicking the link "For Authors" on our journal homepage (http://www.eurjic.org). These settings are: Print Setup: Orientation Portrait. Caption and Label Settings: Font Times New Roman, Font Style Standard, Size 12.

Note that the graphical abstract must be in one-column format and in black-and-white.

These settings help ensure the correct letter-size-to-graphic-width ratio for best reproduction.

Use abbreviations such as R^1 , R^2 (not R_2), R', R'', Ph, Me, Et, iPr, tBu, Ph, Bn (benzyl), Bz (benzoyl), Hal, L, M (metal), X (heteroatom).

4. Crystallographic Data

Authors must deposit the data of X-ray structure analyses in a crystallographic database before submitting their manuscript, so that referees can access the information electronically. The two databases, the Cambridge Crystallographic Data Centre (CCDC) and the Fachinformationszentrum Karlsruhe (FIZ) have the same procedure for the deposition of data and both will be pleased to provide help. In general, you will receive a depository number from the database two working days after electronic deposition. Send your data to the appropriate address below and quote the standard text, including the depository number, in your manuscript.

• For all compounds without C-H bonds:

Fachinformationszentrum Karlsruhe (FIZ) 76344 Eggenstein-Leopoldshafen, Germany

Phone: +49-(0)7247/808-205 Fax: +49-(0)7247/808-666

E-mail: crysdata@fiz-karlsruhe.de

FTP: ftp.fiz-karlsruhe.de (under path /pub/csd)

WWW: http://www.fiz-karlsruhe.de (under "Products and Services")

Further details of the crystal-structure investigation(s) may be obtained from the Fachinformationszentrum Karlsruhe, 76344 Eggenstein-Leopoldshafen, Germany, on quoting the depository number(s) CSD-....

• For all compounds with at least one C-H bond:

Cambridge Crystallographic Data Centre (CCDC) 12 Union Road, Cambridge CB2 1EZ, UK

Phone: +44-(0)1223/336-408 Fax: +44-(0)1223/336-033 E-mail: deposit@ccdc.cam.ac.uk WWW: http://www.ccdc.cam.ac.uk

CCDC-****** contains the supplementary crystallographic data for this paper. These data can be obtained free of charge from The Cambridge Crystallographic Data Centre via www.ccdc.cam.ac.uk/data_request/cif.

NOTE: Please use the free online **Checkcif** service provided by the International Union of Crystallography and submit the Checkcif report along with your manuscript: http://journals.iucr.org/services/cif/checkcif.html.

Finally, before you return your revised manuscript, please update your database entry if necessary.

5. Electronic Supporting Information

A manuscript may include Electronic Supporting Information which will be accessible only on the WWW. Authors must keep a copy to make available to readers who do not have access to the internet. As this material [text, tables, schemes, figures but not crystallographic (CIF) data, which must be submitted to either the FIZ or the CCDC] undergoes the peer review process, it must be included, clearly marked as "Supporting Information to be published electronically", when the paper is submitted. The following file for-

mats are accepted: MS Winword or ASCII (*.doc, *.txt), MS Excel (*.xls), Encapsulated Postscript (*.eps), Portable Document Format (*.pdf), graphics embedded in MS Winword; if you wish to submit other formats, please consult the Editorial Office. When preparing such material, authors should keep in mind that — once accepted — it will be made available as provided by the author and not edited. Material accepted for electronic publication will be available mostly as PDF files (Adobe Acrobat Reader required) by following the Table of Contents link of EurJIC's WWW home page. A standard text will be added on the first page of the article in the printed version:

• Supporting information for this article is available on the WWW under http://www.eurjic.org or from the author.

The supporting information file must start with the title of the paper, the authors and the CASSI abbreviation of the journal to which it was submitted (e.g. Eur. J. Inorg. Chem.).

6. Basic Keyword List

To increase the relevance of articles found by search engines of Wiley InterScience, we have compiled a keyword catalogue common to our chemistry journals that is printed here and is also available online (http://www.eurjic.org).

To assist you in finding keywords they are listed according to categories. You may choose keywords from any category. As with all such records, a few guidelines facilitate the catalogue's use, and these are briefly explained below:

- 1. As many as possible, but at least two, of the maximum of five keywords assigned to an article must come from this list.
- 2. Named reactions will be incorporated only in exceptional cases. Generally the reaction type is selected instead. For example, Diels—Alder reactions will be found under "Cycloadditions" and Claisen rearrangements under "Rearrangements".
- 3. Heteroanalogues of compounds are mainly classified under the C variants, for example, (hetero)cumulenes, (hetero)dienes. A few aza and phospha derivatives are exceptions.
- 4. Compounds with inorganic components that are central to the article are listed under the element, for instance, iron complexes under "Iron". Some group names like "Alkali metals" exist along-side the names of important members of the group like "Lithium". In such cases the group name is used for these members only when comparative studies are described. The members not appearing separately are also categorised under the group name.
- 5. A keyword in the form "N ligand" is only chosen if a considerable portion of the paper deals with the coordination of any ligand ligating through the atom concerned.
- 6. Spectroscopic methods are assigned as keywords only if the article is about the method itself, or if the spectroscopic technique has made an important contribution to the problem under investigation.
- 7. "Structure elucidation" is intended only if the crux of the paper is a structural elucidation or if a combination of several spectroscopic techniques were needed for conclusive solution of the structure
- 8. An attempt has been made to avoid synonyms and to select more general concepts rather than specialized terms. Thus, the term "Double-decker complexes" is excluded in favour of "Sandwich complexes".

This list will be a "living" catalogue to be flexible enough to absorb the new developments in chemistry. We therefore welcome all suggestions from our authors that might improve its user-friendli-

Analytical Chemistry and Spectroscopic Methods

Analytical methods Circular dichroism Cyclic voltammetry Electron diffraction Electron microscopy Electrophoresis ENDOR spectroscopy

EPR spectroscopy **EXAFS** spectroscopy Fluorescence spectroscopy Gas chromatography High-throughput screening Ion chromatography Ion exchange IR spectroscopy Isotopic labeling Laser spectroscopy Liquid chromatography

Luminescence Mass spectrometry

Moessbauer spectroscopy Neutron diffraction NMR spectroscopy

Photoelectron spectroscopy Plasma chemistry Raman spectroscopy

Rotational spectroscopy Scanning probe microscopy

Sensors

Surface analysis

Surface plasmon resonance

Trace analysis UV/Vis spectroscopy Vibrational spectroscopy Water chemistry

X-ray absorption spectroscopy

X-ray diffraction ZEKE spectroscopy

Biological Chemistry and Chemical Biology (including Biochemistry, Bioinorganic Chemistry, Bioorganic Chemistry, Medicinal Chemistry and Molecular and Cell Biology)

Allosterism Amino acids Angiogenesis Antibiotics Antibodies Antifungal agents Antigens Antisense agents Antitumor agents Antiviral agents

Azapeptides Azasugars **Bioinformatics** Bioinorganic chemistry Biological activity Biomimetic synthesis Bioorganic chemistry Biophysics Biosensors

Biosynthesis Biotransformations C-Glycosides Carbohydrates Carbon dioxide fixation

Carotenoids Cell adhesion Cell recognition Cerebrosides Chaperone proteins Cobalamines

Cofactors Combinatorial chemistry

Cyclitols Cyclodextrins Cytokines DNA

DNA cleavage DNA damage DNA methylation DNA recognition DNA replication DNA structures **Dopamines** Drug delivery Drug design Electron transport Enzyme models Enzymes

Fibrous proteins Fluorescent probes Gene expression Gene sequencing Gene technology Genomics Glycoconjugates Glycolipids

Glycoproteins Glycosides Glycosylation Growth factors Helical structures Heme proteins Hormones Hydrolases Immobilization

Glycopeptides

Immunoassays Immunochemistry Immunology Inhibitors Ion channels Ionophores

Isomerases Ligases Lipids

Lipophilicity Lipoproteins Liposomes Lyases

Medicinal chemistry Membrane proteins Membranes Metabolism Metalloenzymes Metalloproteins

Micelles Molecular evolution

mRNA Mutagenesis Natural products Neurochemistry Neurotransmitters Nitrogen fixation

Nitrogenases Nucleic acids Nucleobases Nucleosides Nucleotides Oligonucleotides Oligosaccharides

Oxidoreductases Peptide nucleic acids

Peptides Peptidomimetics Pheromones Phospholipids Photoaffinity labeling

Photosynthesis

Phytochemistry Polyketides

Polymerase chain reaction

Prodrugs Prostaglandins Protein design Protein engineering Protein folding Protein models Protein modifications Protein structures **Proteins** Proteomics Proton transport Radiopharmaceuticals

Receptors Redox chemistry Ribonucleosides Ribozymes RNA

RNA recognition

RNA structures

Sensitizers Sequence determination Sialic acids Siderophores

Signal transduction Sphingolipids Steroids

Structure-activity relationships

Terpenoids Toxicology Transferases tRNA Vesicles Vitamins

Catalysis

Asymmetric catalysis Autocatalysis Biphasic catalysis

Catalytic antibodies Enzyme catalysis

Heterogeneous catalysis Homogeneous catalysis

Phase-transfer catalysis Supported catalysts

Coordination Chemistry: Compound Classes

Cage compoundsCupratesMetallacyclesPolyoxometalatesChelatesDendrimersMetallocenesSandwich complexes

Clathrates Heterometallic complexes Nitrogen oxides Ylides

Cluster compounds

Coordination Chemistry: Ligand Classes

Alkene ligands Carboxylate ligands Macrocyclic ligands Phosphane ligands Alkyne ligands Carbyne ligands N ligands P ligands Allyl ligands Cyclopentadienyl ligands N,O ligands S ligands Si ligands Arene ligands Diene ligands N,P ligands As ligands Dioxygen ligands O ligands Tridentate ligands Oxo ligands Bridging ligands Fluorinated ligands Tripodal ligands Carbene ligands Hydride ligands Peroxo ligands Vinylidene ligands Carbonyl ligands Isocyanide ligands

Coordination Chemistry: Methodology and Reactions

Carbon dioxide fixation Matrix isolation Oxidation Solvolysis

Chemical vapor deposition Metathesis Radical reactions Substituent effects

Chiral resolution Production Reduction Township or supplied to the control of the control of

Chiral resolution Neighboring-group effects Reduction Template synthesis

Crystal engineering Nitrogen fixation Ring-opening polymerization Ligand design O-O activation Solvent effects

Coordination Chemistry: Structure

Agostic interactions Electronic structure Inclusion compounds Noncovalent interactions Aurophilicity Isolobal relationship Electrostatic interactions Pi interactions Charge transfer Fluxionality Jahn-Teller distortion Stacking interactions Cooperative effects Helical structures Ligand effects Structure elucidation Coordination modes Host-guest systems Metal-metal interactions Through-bond interactions Donor-acceptor systems Hydrogen bonds Multiple bonds Through-space interactions

Electron-deficient compounds

Elements and Element Groups

Actinides Chlorine Iron Phosphorus Alkali metals Chromium Krypton Platinum Pnicogens Alkaline earth metals Cobalt Lanthanides Copper Potassium Aluminum Lanthanum Antimony Deuterium Lead Rare earths Argon Fluorine Lithium Rhenium Arsenic Gallium Magnesium Rhodium Barium Germanium Manganese Rubidium Beryllium Gold Mercury Ruthenium Bismuth Group 13 elements Molybdenum Samarium Boron Group 14 elements Neon Scandium Hafnium Nickel Selenium **Bromine** Cadmium Halogens Niobium Silicon Calcium Helium Nitrogen Silver

Noble gases

Osmium

Oxygen

Palladium

www.eurjic.org

Hydrogen

Indium

Iodine

Iridium

Sodium

Sulfur

Strontium

Tantalum

Carbon

Cerium

Cesium

Chalcogens

TechnetiumTitaniumVanadiumYttriumTelluriumTungstenXenonZincThalliumUraniumYtterbiumZirconium

Tin

Environmental and Atmospheric Chemistry

Anions Environmental chemistry Oxidation Reaction mechanisms
Atmospheric chemistry Fluorine Ozone Reactive intermediates

Cations Gas-phase reactions Peroxides Sensors Chlorine Green chemistry Photochemistry Toxicology Computer chemistry Halogenation Photolysis Trace analysis Crop protection agents Kinetics Photooxidation Waste prevention Cycloaddition Water chemistry Molecular dynamics Radical ions

Radical reactions

Desulfurization Nitrogen oxides Radicals

Molecular modeling

Inorganic Chemistry

Denitrification

Alanes Cyanides Nonstoichiometric compounds Sol-gel processes Allotropy Electron-deficient compounds Organic-inorganic hybrid Solid-phase synthesis Solid-state reactions Alloys Fluorides composites Aluminosilicates Perovskite phases Halides Solid-state structures Amalgams High-pressure chemistry Peroxides Solvothermal synthesis

Amorphous materials

Amorphous materials

Anions

High-pressure chemistry

Hosphaalkenes

Phosphaalkenes

Phosphaalkynes

Solvothermal sy

Spinel phases

Stannanes

Automerization Hydrides Phosphanes Subvalent compounds Phosphazenes Autoxidation Hypervalent compounds Synthesis design **Platinates** Titanates Azides Inclusion compounds Bond theory Topochemistry Intercalations Pnictides Intermetallic phases Polyanions Transition metals Boranes

Borates Isoelectronic analogues Polycations Transuranium elements
Carbene homologues Isomers Polychalcogenides Valence isomerization

CarbidesLayered compoundsPolyhalidesVanadatesCarboranesLewis acidsPolymorphismZeolite analoguesCationsLewis basesPolyoxometalatesZeolites

Chain structures Main group elements Radical ions Zincates
Chromates Metal—metal interactions Radicals Zintl anions
Clathrates Mixed-valent compounds Silanes Zintl phases

Cluster compounds Nitrides Silicates

Intercalations

Materials Science: General

Copolymerization

24

Alloys Crystal engineering Interfaces Microporous materials Amorphous materials Crystal growth Intermetallic phases Monolayers Automerization Cyclooligomerization Ladder polymers Nanostructures Block copolymers Cyclotrimerization Layered compounds Nanotechnology Dendrimers Liquid crystals Ceramics Nanotubes Charge-carrier injection Doping Materials science Nonlinear optics Chemical vapor deposition Energy conversion Mechanical properties Polymerization Fullerenes Chemical vapor transport Membranes Polymers

Clays Gels Mesophases Ring-opening polymerization

Cluster compounds Glasses Mesophases Scanning probe microscopy

Cluster compounds Glasses Mesoporous materials Scanning probe microscopy
Colloids Holography Metal-metal interactions Semiconductors
Conducting materials Imprinting Metallomesogens Sensitizers

Micelles

Sensors

Eur. J. Inorg. Chem. 2005, 19-26

Superconductors Thin films Zeolite analogues Zeolites Surface chemistry Vesicles

Miscellaneous

History of science

Organic Chemistry: Compound Classes

Peroxides Alcohols Betaines Enols Biaryls Aldehydes Enones Pheromones Calixarenes Alkaloids Envnes Phosphorus heterocycles Carbanions Alkanes Fatty acids Phthalocyanines Carbenes Alkenes Fragrances Polycycles Carbenoids Polymethines Alkynes Fullerenes Carbocations Allenes Fused-ring systems Porphyrinoids Carbocycles Heterocycles Allylic compounds Quinodimethanes Carbohydrates Amides Hydrazones Ouinones Carboxylic acids Amines Hydrides Radical ions Carotenoids Amino acids Catenanes Hydrocarbons Radicals Amino alcohols Cations Ketones Rotaxanes Amino aldehydes Cavitands Lactams Schiff bases Crown compounds Amphiphiles Small ring systems Lactones Cryptands Anhydrides Ladder polymers Spiro compounds Cumulenes Anions Macrocycles Steroids Cyanides Annulenes Mannich bases Sulfonamides Cyanines Arenes Medium-ring compounds Sulfur heterocycles Cyclodextrins Arynes Metallacycles Surfactants Cyclophanes Azides Natural products **Terpenoids** Dendrimers Azo compounds Nitrogen heterocycles Ylides Diazo compounds Azomethine ylides Oxygen heterocycles Zwitterions Dyes/Pigments

Organic Chemistry: Methodology and Reactions

Cleavage reactions High-pressure chemistry Oligomerization Acvlation Aldol reactions Combinatorial chemistry Hydroamination Oxidation Alkylation Hydroboration Oxygenation Cracking Allylation Cross-coupling Hydroformylation Ozonolysis Amination Cyclization Hydrogen transfer Perfluorinated solvents Cycloaddition Annulation Hydrogenation Pericyclic reaction Aromatic substitution Cyclotrimerization Hydrolysis Phosphorylation Aromaticity Dehydrogenation Hydrosilylation Photooxidation Asymmetric amplification Dihydroxylation Hydrostannation Polymerization Asymmetric catalysis Dimerization Hydroxylation Protecting groups Asymmetric synthesis Domino reactions Immobilization Protonation Automerization Electrocyclic reactions Insertion Radical reactions Electrophilic addition Autoxidation Ionic liquids Rearrangement Biomimetic synthesis Electrophilic substitution Isomerization Reduction Elimination C-C activation Lithiation Retro reactions Metalation C-C coupling Ene reaction Ring contraction C-H activation **Epoxidation** Michael addition Ring expansion C1 building blocks Flash pyrolysis Molecular diversity Sigmatropic rearrangement Carbonylation Glycosylation Multicomponent reactions Solid-phase synthesis

C1 building blocks Flash pyrolysis Molecular diversity Sigmatropic rearr Carbonylation Glycosylation Multicomponent reactions Solid-phase syntl Carboxylation Grignard reaction Nucleophilic addition Solvent effects Chiral auxiliaries Halogenation Nucleophilic substitution Solvolysis Chiral pool Heck reaction Olefination Steric hindrance

Substituent effects Template synthesis Total synthesis Umpolung Transesterification Wittig reactions Topochemistry Synthesis design

Synthetic methods

Organic Chemistry: Stereochemistry and Structures

Configuration determination Enantioselectivity Strained molecules Atropisomerism Conformation analysis Chemoselectivity Hyperconjugation Structure elucidation Chiral resolution Kinetic resolution Conjugation Tautomerism

Chirality Diastereoselectivity Regioselectivity Valence isomerization

Physical Chemistry and Chemical Physics (including Electrochemistry, Kinetics, Photochemistry, Radiochemistry, Thermodynamics and Theoretical Chemistry)

Ab initio calculations Electron transfer Langmuir-Blodgett films Plasma chemistry ELF (Electron Localization Polarized spectroscopy Absorption Laser chemistry Acidity Function) Lewis acids Quantum chemistry Adsorption Energy conversion Lewis bases Radiochemistry Basicity Exchange interactions Linear free energy relationships Radiopharmaceuticals Reaction mechanisms **Biophysics** Femtochemistry Liquid crystals Bond energy Liquids Fluorescence Reactive intermediates Bond theory Fluorescent probes Low-temperature studies Redox chemistry Calorimetry Fractals Magnetic properties Salt effect

CARS (Coherent FRET (Fluorescence Resonance Matrix isolation Semiempirical calculations Anti-Stokes Raman Scattering) Energy Transfer) Mesophases Single-molecule studies Charge-carrier injection Gas-phase reactions Metallomesogens Singlet oxygen

Charge transfer Gels Metastable compounds Sol-gel processes Chemisorption Solvatochromism Glasses Microreactors Chromophores Group theory Molecular dynamics Spin crossover Colloids Heats of formation Molecular electronics Statistical mechanics Computer chemistry High-pressure chemistry Molecular modeling Statistical thermodynamics Conducting materials High-temperature chemistry Monolayers Structure-activity relationships

Conical intersections Hot-atom chemistry Nanotechnology Superacidic systems Crystal engineering Hydrophobic effect Neighboring-group effects Supercritical fluids Crystal growth Imaging agents Nonequilibrium processes Thermochemistry Cyclic voltammetry Phase diagrams Thermodynamics Ion pairs

Density functional calculations Ion-molecule reactions Phase transitions Time-resolved spectroscopy

Donor-acceptor systems Photochemistry Transition states Ionization potentials Doping Isotope effects Photochromism Viruses Photolysis Voltammetry Electrochemistry Isotopes Electron microscopy Kinetics Physisorption

Supramolecular Chemistry

Molecular devices

Aggregation Molecular evolution Pi interactions Self-assembly

Host-guest systems Molecular recognition Receptors Supramolecular chemistry

Nanostructures