

## Habilitation Obtained at the Institute

1. **Magdalena Zimnicka** "From incomplete to comprehensive structural description of bioactive compounds by ion mobility mass spectrometry" 20.01.2023
2. **Cina Foroutan-Nejad** "Controlling Chemical Processes by External Electric Fields: from Basics to Molecular Electronics" 16.12.2022
3. **Marcin Górecki** "Holistic approach to chiroptical methods and techniques as an effective tool in the stereochemical analysis of bioactive compounds" 14.10.2022
4. **Mykhaylo Potopnyk** "Molecular design, synthesis and photophysical properties of 1,3-thiazole-containing N,O-coordinated organoboron complexes" 17.12.2021
5. **Bartosz Zambrón** "Reactions of 4-vinyl- and 4-ethynyl- $\beta$ -lactam-derived chiral organoindiums with aldehydes in the presence of InI and catalytic amounts of Pd(PPh<sub>3</sub>)<sub>4</sub>" 26.02.2021
6. **Dominik Koszelewski** "A new dimension of the enzymes promiscuity for the organic synthesis and medicinal applications" 28.02.2020
7. **Michał Michalak** "Application of N-heterocyclic carbene complexes for the activation of terminal alkynes" 28.02.2020
8. **Wojciech Chaładaj** „Reactions involving intramolecular nucleophilic additions to alkynes triggered by the coordination of the transition metal complex to C-C multiple bond" 14.06.2019
9. **Rafał Loska** „New reactions of dipolar cycloaddition of azine and azole N-oxides" 9.03.2018
10. **Sebastian Stecko** „An application of allyl cyanate-to-isocyanate sigmatropic rearrangement in synthesis of unnatural amino acids" 10.06.2016
11. **Agnieszka Szumna** "Chiral molecular containers – synthesis, structure and recognition properties" 16.04.2010
12. **Zbigniew Pakulski** "Regio- and stereoselectivity in glycosylation" 16.12.2008
13. **Dorota Gryko** "New, efficient organocatalysts for the direct asymmetric reaction" 25.04.2008
14. **Krzysztof Staliński** "New ideals in radical chemistry and their application in organic synthesis" 8.01.2007
15. **Jacek Młynarski** „Asymmetric aldol reaction: aldol-Tishchenko reaction and Mukaiyama reaction in aqueous solvents" 9.10.2006 r.

16. **Bartłomiej Furman** "Intramolecular conjugate addition of allylsilanes, propargylsilanes and vinylstannanes to 2,3-dihydro-4-pyridones. An efficient route to stereoselective construction of azabicyclic ring systems" 27.04.2006
17. **Ryszard Łażny** "New applications of triazenes and hydrazones in solution-phase and solid-phase organic synthesis" 4.11.2005
18. **Wojciech Schilf** "Application of nuclear magnetic resonance in intramolecular hydrogen bonding and tautomeric equilibria study of some nitrogen contain bases" 23.06.2005
19. **Jerzy Raczko** "Diastereoselective functionalization of acyclic systems derived from 2-methylfuran, an easy access to polihydroxylated precursors of natural products" 25.06.2004
20. **Karol Grela** "Search for new catalyst and investigation of metathesis alkanes and alkynes" 16.06.2003
21. **Daniel Gryko** "Synthesis of meso-substituted corroles" 16.06.2003
22. **Robert Kawęcki** „Application of 10-izobornylsulfinyl group in stereoselective synthesis. New reactions of sulfinylimines and N-borylimines". 6.06.2002
23. **Zbigniew Wróbel** "Basis and Lewis acids catalyzed reactions of nitroarens with nucleophilies proceeded via reduction of the nitro group" 22.02.2002
24. **Marek Majewski**, „Enantioselective Deprotonation of Cyclic Ketones", 23.02.2001
25. **Jadwiga Frelek**, „Transition metal complexes as auxiliary chromophores in structural studies using circular dichroism spectroscopy", 8.06.2000.
26. **Zbigniew Kałuża**, „A New Strategy of Stereocontrolled Synthesis of 1-Dethia-1-oxacephams", 25.02.2000.
27. **Jarosław Dariusz Jaźwiński**, „Application of Nuclear Magnetic Resonance for Identification and Structural Investigation of Mesoionic Oxatriazoles, Thiatriazoles and Tetrazoles", 10.12.1999.
28. **Ryszard Ostaszewski**, „Synthesis and Complexing Properties of Anthracene Receptors", 6.10.1999.
29. **Stanisław Ostrowski**, „New Efficient Approaches to Fused Pyrimidine Rings and Their Application for Synthesis of Purines", 8.06.1999.
30. **Witold Danikiewicz**, „Elimination of the Neutral Molecules during Fragmentation of the Selected Aromatic Compounds on Electron Ionization", 26.02.1999.
31. **Marek Kabat**, „Synthesis of Racemic and Chiral Carbonyl compounds substituted in  $\alpha$ -Position by Fluorine", 5.01.1996.

32. **Krzysztof Wojciechowski**, „Generation and Reactions of Aza-orto-xyllylenes”, 13.12.1993.
33. **Marek Malinowski**, „Application of Low-Valent Titanium [Ti(O)] in Selected Reactions of Organic Synthesis”, 12.06.1992.
34. **Bogdan Korybut-Daszkiewicz**, „Synthesis, Structure and Properties of Nickel (II) Complexes with Macrocyclic Ligands Containing Donor Groups in Side Chains”, 13.05.1992.
35. **Marek Pietraszkiewicz**, „Design, Synthesis and Complexing Properties of Chiral Macrocyclic Receptors Derived from D-Mannose”, 13.05.1992.
36. **Andrzej Barański**, „Studies of [2+3]Cycloaddition Reactions of Nitroalkenes with *N*-Oxides of Aromatic Nitriles”, 11.10.1991.
37. **Jerzy Boryski**, „Chemical Synthesis and Properties of Some Biologically Important Derivatives of Guanosine”, 13.12.1991.
38. **Jan Kapuściński**, „Destabilization of Secondary Structure of Nucleic Acids and Their Condensation Induced by Intercalators”, 21.06.1991.
39. **Sławomir Jarosz**, „Stereoselective Synthesis of Higher Sugars”, 2.04.1990.
40. **Karol Stanisław Bruzik**, „Studies on Stereochemistry of Phospholipids and Model Membranes”, 23.06.1988.
41. **Ryszard Kierzek**, „Chemical Synthesis of Oligoribonucleotides with Solid Support by the Phosphite Amide Method, Some Examples of Application”, 12.05.1988.
42. **Łukasz Kaczmarek**, „The Synthesis and Some Properties of New Polynitrogen Heterocyclic Systems”, 12.05.1988.
43. **Jan Bimer**, „Solubilization of Bituminous Coals in the Reaction of Reductive Alkylation and Reaction with Alcohols and Alkalies”, 14.05.1987.
44. **Wojciech Dmowski**, „Nucleophilic Reactions of 1-Substituted Pentafluoropropenes”, 21.11.1985.
45. **Wojciech Markiewicz**, „The Synthesis, Properties and Applications of 1,3-Dichloro-tetraisopropyldisiloxane in the Chemistry of Nucleic Acids”, 27.06.1985.
46. **Roman Balicki**, „The Synthesis, Reactions and Transformations of Pyrazolo(3,4-b)pyridine and Pyrazolo(1,5-a)pyrimidine Rings”, 29.10.1984.
47. **Andrzej Zygmunt Rykowski**, „Transformations of the 1,2,4-triazine ring in the Reaction with Amide Ion”, 18.05.1984.
48. **Włodzimierz Józef Krzyżosiak**, „A method for modification of Nucleic acids with chloroacetic aldehyde”, 23.02.1984.

49. **Krystyna Kamieńska-Trela**, „Correlation of the Stretching Force Constants of the Carbon-Carbon Bonds ( $K_{CC}$ ) with the  $^{13}C$ - $^{13}C$  Spin-Spin Coupling Constants ( $J_{CC}$ )”, 14.06.1982.
50. **Danuta Bodzek**, „Investigation of Coal, and Coal liquids Using Mass Spectrometry”, 25.02.1982.
51. **Ryszard Adamiak**, „Chemical Synthesis of Oligoribonucleotides-tRNA Fragments, Containing Hypermodified Nucleoside  $N^6$  (N-Threonylcarbonyl) Adenosine”, 14.06.1982.
52. **Jacek Stawiński**, „Chemical Synthesis of Oligodeoxyribonucleotides and Their Applications in Molecular Biology”, 19.04.1982.
53. **Edward Grochowski**, „Application of Quaternary Phosphonium Salts in Synthesis of *O*-Alkyl, and *O*-Acyl Derivatives of Hydroxylamine”, 25.02.1982.
54. **Marek Cyprian Chmielewski**, „Butyl (*E*)-2-Hydroxy-6-oxohex-4-enoate a Novel Substrate for Total Synthesis of Deoxy-Sugars”, 25.05.1981.
55. **Wojciech Kroszczyński**, „Michael Reaction as a Method of Functionalization of Ring A of Steroids Skeleton”, 25.05.1981.
56. **Grzegorz Gryniewicz**, „Selective Transformations of Monosaccharides Induced by the Reagent System: Alkyl Azodicarboxylate-Phosphine”, 12.11.1979.
57. **Lech Kozerski**, „Studies of Intramolecular Process and Regioselectivity of Reactions in Systems with Polarized Double Bonds”, 12.11.1979.
58. **Krzysztof Krowicki**, „Synthesis of Trihydroxy- and Dimercaptopyridines and Similar Compounds with Potential Cytostatic Activity”, 14.05.1979.
59. **Janusz Jurczak**, „Stereochemistry of [4+2]Cycloaddition under High Pressure”, 8.10.1979.
60. **Lech Stanisław Stefaniak**, „Nitrogen nuclear Magnetic Resonance as an Effective Method of Structure Determination of Heteroaromatics”, 14.05.1979.
61. **Maria Danuta Bratek-Wiewiórska**, „Further Studies on the Chemistry and Structure of Angustifoline”, 18.12.1979.
62. **Mieczysław Boduszyński**, „The Role of Group Components in the Structure of Asphalts from Oil”, 9.10.1978.
63. **Andrzej Robert Daniewski**, „Total Synthesis of Estrane Derivatives”, 13.12.1976.
64. **Stanisław Krzyżanowski**, „Studies on the Mechanism of Formation of Organic Radicals in Zeolites”, 24.06.1976.

65. **Anna Banaszek**, „Total Synthesis of Glycosides of Racemic Hexoses, Starting from 2-Methoxy-5, 6-Dihydro-2H-Pyran Derivatives”, 8.04.1976.
66. **Zofia Dega-Szafran**, „The Hydrogen Bond in Complexes of 2,2'-Bipyridil and Its Derivatives with Acids”, 29.01.1976.
67. **Stanisław Tyrlik**, „Catalytic and Stechiometric Reactions of Olefins  $RCH=CH_2$  with Cobalt-Hydrogen Bond in Tris (triphenylphosphine) dinitrogen Cobalt Hydride (I)”, 14.02.1974.
68. **Wojciech Stec**, „Stereochemistry of Nucleophilic Substitution at the Phosphorus Atom”, 22.11.1973.
69. **Piotr Tomasiak**, „Chemistry of Heterocyclic Compounds Based on Hammett's Concepts”, 7.06.1973.
70. **Stefan Marcinkiewicz**, „New Aspect of “Non-Mechanism” Rearrangements”, 21.12.1972.
71. **Bożena Golankiewicz**, „Studies of Dehydrogenative Specificity of Mercuric Acetate on Partially Hydrogenated Cinchona Alkaloids” 9.11.1972.
72. **Włodzimierz Daniewski**, „Structure of Lactarorufine-Metabolite of *Lactarius rufus*”, 6.07.1972.
73. **Czesław Kajdas**, „The Structure of Some High-Boiling Hydrocarbons from Oil”, 14.11.1968.
74. **Wiesław Sobótka**, „Synthesis of Azasteroid Model System”, 14.11.1968.