

*Mīļie dalībnieki, kolēģi un viesi!*

*Dear Participants, Colleagues, and Guests!*

Welcome to the third *Balticum Organicum Syntheticum (BOS)*, a conference which continues the tradition of BOS 2000 and 2002, both held in Vilnius, Lithuania, in the following aims:

- To highlight forefront activities in synthetic organic chemistry world-wide;
- To provide a window to Baltic chemistry which, although still in evolutionary stages, shows increasing strengths in part owing to the entrance of the Baltic States into the European Union on May 1, 2004;
- To offer opportunity for interaction between chemists of the Baltic and Western world countries in order to create links, collaborations, and potential research projects in both academic and industrial settings;
- To showcase Riga and the surrounding areas of Latvia and, through it, to tempt appreciation also of Estonian and Lithuanian history, culture, language, and social framework.

The original dream of the organizers has been to share the venue of BOS among the three Baltic States. This dream is now 2/3 fulfilled by BOS 2004 being hosted in Riga, Latvia. Plans for the completion of the dream in Estonia are in progress and will be announced at the end of this conference. Of course, we do not intend to end at one cycle.

We are grateful to the Plenary and Invited Speakers for giving us an outstanding program of synthetic chemistry. Their enthusiastic acceptance to speak gave us joy and made our work effortless. Based on the 2000 and 2002 BOS Conferences, we expect the announcement of a Nobel Prize awardee from the list of 2004 speakers to be made in the future.

We particularly appreciate the response from Poster Contributors, especially from the Baltic students for a large number of high quality presentations for all of us to enjoy. We acknowledge with gratitude contributions from companies world wide (see back of cover page) and Latvian Ministry of Education and Science and Latvian Scientific Council.

Almost needless to say, it is your participation in BOS 2004 that gives us the greatest pleasure. We will attempt to make this conference a memorable chemical and cultural feast for you.

We will also try to teach you some Latvian and, in view of the representation of all Baltic States on our committee, the other two languages:

*Laipni lūdzam Rīgā! Mūsu vēlējums, lai Jums ir interesanta ķīmijas konference un jauna kultūras apguves pieredze!*

*Sveiki atvykę į Rīgą! Linkime Jums visiems, kad konferencija būtų naudinga, įdomi, ir kultūringa.*

*Tere tulemast Rigase! Loodame et konferents Teile koikidele toob vaartust, huuvitust, ja uue kultuurist.*

*Welcome to Riga! Our wish for you is that you have a chemically interesting conference and cultural learning experience!*

On behalf of the Organizing Committee



Victor Sniečkus  
*Chairman, BOS 2004*



Pēteris Trapencieris  
*Chairman, Local OC*

*The conference is organized under the auspices of the Latvian Chemical Society, the Ministry of Education and Science of Latvia, and the Latvian Science Council.*

## **THE ORGANIZING COMMITTEE OF BOS 2004**

*Committee members:*    **Prof. Victor Snieckus**

*Dept of Chemistry  
Queens University, Kingston, ON*

**Prof. Eugenijus Butkus**

*Vilnius University  
Vilnius, Lithuania*

**Dr. Jaan Pesti**

*Bristol-Myers Squibb Co.  
Princeton, NJ USA*

**Dr. Janis Upeslācis**

*Wyeth-Ayerst Research  
Pearl River, NY USA*

**Dr. John Duncia**

*Bristol-Myers Squibb Co.  
Princeton, NJ USA*

*Local Organizing  
Committee*

**Dr. Peteris Trapencieris**

*Latvian Inst. of Organic Synthesis  
Riga, Latvia*

*Dr. Vita Ozola, Asja Višocka, Dr. Ivars Turovskis,  
Dr. Daina Loļa, Dr. Ida Jākobsone, Mārcis  
Trapencieris, and Inna Juhņeviča*

*Baltic Advisory Board*

**Prof. Ivars Kalvins**

*Latvian Inst. of Organic Synthesis  
Riga, Latvia*

**Prof. Jan Backvall**

*Dept. of Organic Chemistry, Stockholm University  
Stockholm, Sweden*

**Prof. Mieczysław Makosza**

*Inst. of Organic Chemistry, Polish Academy of Sciences  
Warsaw, Poland*

**Prof. Uno Mäeorg**

*University of Tartu  
Tartu, Estonia*

## **GENERAL INFORMATION**

- Location The conference will be held at the **Riga Congress Center** (*Kr.Valdemara 5*)
- Transportation Participants arriving by air will have a choice of taxi's or regular buses. Please look for BOS sign for information.
- Registration The on-side registration will be opened on Sunday, June 27, from 12.00 to 18.00 at the Riga Congress Center. The late registration will be held at the Riga Congress Center on Monday, June 28 from 8.00 to 12.00.
- Meals Tickets for lunches (full price 3 Ls; half price 1.5 Ls) could be ordered during registration at RCC. Coffee breaks will be held each day during the morning and afternoon sessions.
- Lectures The program will consist of full length lectures (60 min) and half length lectures (30 min).
- Poster sessions Two poster sessions are provided Monday and Tuesday. Poster authors should set up posters in the morning. Poster boards are identified by numbers accordingly to the numbering in the booklet. The available area for each poster is 100 cm wide by 140 cm high. Please remove posters by the end of the day. The best poster presenters will receive the Thieme Verlag awards on the basis of evaluation of the scientific committee. The prizes include books from publisher.
- Contact phones For any information contact members of LOC at 9-158-550 or 6-135-745.

## SOCIAL PROGRAM

### Sunday, June 27, 2004

- 15:00 City Tour Excursion will leave from the Riga Congress Center (K.Valdemara 5). The guide will speak in English.
- 19:00-22:00 Reception The Opening Reception will occur at the Riga Latvian Society house (Merkela 13) with Latvian music and food, inspired by the midsummer festival "Ligo."

### Monday, June 28, 2004

- 18:00 City Tour  
(*Jugendstyle*) Excursion will leave from the Riga Congress Center (K.Valdemara 5). The guide will speak in English.

### Tuesday, June 29, 2004

- 19:00 Concert at  
Wagner hall String quartet with oboe (conductor Normunds Schnee) (*the cost will be ca 6Ls or 10€*).

### Tuesday, June 29, 2004

- 15:00 Excursion Excursion to the Turaida Castle (buses will leave from Riga Congress Center at 15:00)
- 19:00-22:00 Closing Banquet Conference Banquet at Birini Castle. Buses will transport attendees from Turaida to Birini. A selection of Latvian food will be available in a Latvian country-style setting (inside in case of inclement weather). Music group "Trīs runči" and vocal group "Balsis" (Voices) will attend the event. Note: a sauna will be available, a bathing suit is required and please bring a towel. Buses will begin to ferry attendees home from 22:00 through 23:00.

## CONTENTS

### Plenary and invited speakers

---

<b>PL1</b>		<b>29</b>
	<i>SELECTIVE METHODS TOWARDS THE SYNTHESIS OF BIOLOGICALLY ACTIVE COMPOUNDS</i>	
	<b>Cossy, J.</b>	
<b>PL2</b>		<b>30</b>
	<i>CARBON-HYDROGEN BOND ACTIVATION AND FUNCTIONALIZATION USING TRANSITION METAL COMPLEXES</i>	
	<b>Daugulis, O.; Zaitsev, V. G.</b>	
<b>INV1</b>		<b>31</b>
	<i>FROM RIGID CYCLIC TEMPLATES TO CONFORMATIONALLY STABLE ACYCLIC ANALOGS: THE DISCOVERY OF BMS-639623, A POTENT CCR3 RECEPTOR ANTAGONIST CLINICAL CANDIDATE FOR THE TREATMENT OF ASTHMA</i>	
	<b>John V. Duncia*, Daniel S. Gardner, Joseph B. Santella, Wenqing Yao, George V. DeLuca, Dean S. Wacker, Soo S. Ko, Percy H. Carter, Patricia K. Welch, Eric A. Wadman, Paul Davies, Kimberly A. Solomon, Robert C. Newton, George L. Trainor, Steven M. Friedman, and Carl P.</b>	
<b>PL3</b>		<b>32</b>
	<i>EFFICIENT METHODS FOR THE ASYMMETRIC SYNTHESIS OF BIOACTIVE COMPOUNDS</i>	
	<b>Enders, D.</b>	
<b>PL4</b>		<b>33</b>
	<i>ARCHITECTURAL &amp; DYNAMIC COMPLEXITY IN ORGANIC SYNTHESIS</i>	
	<b>David A. Evans</b>	
<b>INV2</b>		<b>34</b>
	<i>SELECTIVITY IN SYNTHESIS - PREPARATION AND CRYSTALLIZATION CONTROL OF EARLY DRUG CANDIDATES</i>	
	<b>Joseph M. Fortunak</b>	
<b>PL5</b>		<b>35</b>
	<i>REGIOSELECTIVE CROSS-COUPLED REACTIONS OF DIHALOQUINOLINES</i>	
	<b>Richard W. Friesen</b>	
<b>PL6</b>		<b>36</b>
	<i>NITROBENZENESULFONAMIDES: APPLICATION TO TOTAL SYNTHESIS OF NATURAL PRODUCTS</i>	
	<b>Tohru Fukuyama</b>	

---

INV3	NEW ADVANCES IN SELECTED TRANSITION METAL-CATALYZED TRANSFORMATIONS <b>Gevorgyan, V.</b>	37
PL7	C2-SYMMETRIC ENANTIOMERIC HETEROCYCLES: SYNTHETIC STRATEGIES AND APPLICATIONS <b>Kanger, T.</b>	38
PL8	NEW CATALYZED HALOGEN-METAL EXCHANGE REACTION. AN EFFICIENT SYNTHESIS OF FUNCTIONALIZED Mg AND Zn ORGANOMETALLICS <b>Paul Knochel</b>	39
PL9	THE SYNTHESIS OF THAPSIGARGINS AND THEIR POTENTIAL ROLE IN PROSTATE CANCER THERAPY <b>Ley, S. V.</b>	40
PL10	A PRACTICAL SYNTHESIS OF 15(S)-15-METHYL PGF <sub>2</sub> $\alpha$ METHYL ESTER ON SCALE <b>Lipton, M.F.; Havens, J.L.; Tetzlaff, T.A.; Godrej, D.B.; Lungrin, M.D.</b>	41
PL11	NEW CATALYSIS CONCEPTS OF BROAD UTILITY TO CHEMICAL SYNTHESIS <b>Joel Austin, Christopher J. Borths, Michael Brochu, Sean Brown, Nikki Goodwin, Wendy S. Jen, Catharine Larsen, Sandra Lee, Ian Mangion, Robinson Moncure, Alan Northrup, Jake S. Wiener, Nick A. Paras and David W. C. MacMillan*</b>	42
INV4	SELECTIVITY AND REACTIVITY IN METAL-CATALYZED ALLYLIC ALKYLATIONS <b>Moberg, Christina; Belda, Oscar; Zalubovskis, Raivis</b>	43
PL12	TOTAL SYNTHESIS IN PERSPECTIVE <b>Nicolaou, K.C.</b>	44
SP1	BREAKTHROUGHS IN ORGANIC MATERIALS CHEMISTRY FOR ELECTRONICS AND PHOTONICS <b>Elsa Reichmanis</b>	45
PL13	AMIDE LINKED RNA: SYNTHESIS OF NOVEL BIOPOLYMER MIMICS <b>Rozners, E.; Liu, Y.; and Xu, Q.</b>	46

<b>INV5</b>		<b>47</b>
	<i>NEWS FROM INDUSTRIAL BORONIC ACID PREPARATION</i>	
	<b>Scherer, Stefan Dr.</b>	
<b>INV6</b>		<b>48</b>
	<i>SYNTHESIS AND ANTIFUNGAL ACTIVITY OF SUBSTITUTED PYRIDOPYRIMIDINONES AND QUINAZOLINONES - THE DISCOVERY OF PROQUINAZID, A NEW AND POTENT POWDERY MILDEW CONTROL AGENT</i>	
	<b>Selby, T. P.; Sternberg, C. G.; Berezna, J. F.; Coats, R. A.; Marshall, E. A.;</b>	
<b>PL14</b>		<b>49</b>
	<i>VARIATIONS ON THE WOODWARD RESERPINE THEME</i>	
	<b>Gilbert Stork</b>	
<b>INV7</b>		<b>50</b>
	<i>STREAMLINING PROCESS DEVELOPMENT USING PARALLEL EXPERIMENTATION: OUR FIRST EXPERIENCES</i>	
	<b>Martial Bertrand, Pascal Boquel, Laurent Delhaye, Michael Haurez, Ioannis Houpis, Alain Merschaert, Cecilia Siddi, Jean-Pierre Van Hoek, Ulf Tilstam</b>	
<b>PL15</b>		<b>51</b>
	<i>STRUCTURE, MECHANISM AND SYNTHESIS OF ANALOGS OF CYCLIC PEPTIDES</i>	
	<b>John C. Vederas</b>	
<b>PL16</b>		<b>52</b>
	<i>ASYMMETRIC SYNTHESIS OF THE TACE INHIBITOR BMS-561392</i>	
	<b>Robert E. Waltermire</b>	
<b>PO1</b>		<b>53</b>
	<i>UNEXPECTED DIRECTION OF THE REACTION OF ETHYL 2-(DIETHYLPHOSPHONO)PROPIONATE WITH 2,2-DISUBSTITUTED-1,3-CYCLOPENTANEDIONES</i>	
	<b>Aav, R.; Kanger, T.; Pehk, T. and Lopp, M.</b>	
<b>PO2</b>		<b>54</b>
	<i>SYNTHESIS OF VICINAL AMINO ALCOHOLS FROM TARTARIC ESTER</i>	
	<b>Ausmees, K.; Kulper, K.; Pehk, T.; Kanger, T.; Lopp, M.</b>	
<b>PO3</b>		<b>55</b>
	<i>NOVEL PLATINUM(0)-CARBENE COMPLEXES. SELECTIVE AND EFFICIENT CATALYSTS FOR THE HYDROSILYLATION REACTION</i>	
	<b>Berthon-Gelloz Guillaume, Michaud Guillaume, Stérin Sébastien, Buisine Olivier, Briere Jean-Francois, Mignani Gérard, Marko Istvan</b>	

---

---

PO4		56
	<i>THE DEVELOPMENT OF AN EFFICIENT AND CONVERGENT SYNTHESIS OF AN ANB3 INTEGRIN ANTAGONIST</i>	
	<b>Bishop, B. C.; Brands, K. M. J.; Cowden, C. J.; Davies*, A. J.; Dolling, U.-H.; Keen, S. P.; Lieberman, D. R. and G. W. Stewart</b>	
PO5		57
	<i>DEVELOPMENT AND APPLICATION OF BIFUNCTIONAL ORGANIC CATALYSTS</i>	
	<b>Alex Blatch, A. Whiting</b>	
PO6		58
	<i>SELECTIVE NOREPINEPHRINE RE-UPTAKE INHIBITORS: SYNTHESIS, BIOLOGICAL ACTIVITY AND ADME PROPERTIES</i>	
	<b>John R. Boot, Barry P. Clark, Gordon Campbell, Manuel Cases, John R. Harris, Helen-Louise Haughton, Sivi Mahadevan, Teresa T. Man, John J. Masters, Helene Rudyk, Magnus W. Walter, R. Wilkes* and C. Montalbetti*</b>	
PO7		59
	<i>PHOTOMEDIATED SYNTHESIS OF CUPARENE AND HERBERTANE SESQUITERPENOIDS</i>	
	<b>Boxall, R. J.; Grainger, R. S.*; Ferris, L.</b>	
PO8		60
	<i>SYNTHESIS OF MOLECULAR MATERIALS CONTAINING IMIDAZOLE, DIHYDROPYRIMIDINEDIONE AND TRIAZOLE MOIETIES</i>	
	<b>K. Brokaite, V. Mickevičius</b>	
PO9		61
	<i>REACTIONS OF BENZIMIDAZO[1,2-C]THIADIAZOLES AND BENZIMIDAZO [1,2-C] [1,2,3,5]THIATRIAZOLE</i>	
	<b>Bučinskaite, V.; Labanauskas, L.; Urbelis G.; Šarlauskas J.; Udrenaite, E.</b>	
PO10		62
	<i>NOVEL PROCEDURES FOR THE SYNTHESIS OF 2-DEOXYSTREPTAMINE</i>	
	<b>Guske F. Busscher, Bart Verheijen, Stan Groothuys, Floris P.J.T. Rutjes, Floris L. van Delft</b>	
PO11		63
	<i>NOVEL CHIRAL HETEROLEPTIC MAGNESIUM AMIDES FOR USE IN ENANTIOSELECTIVE DEPROTONATIONS</i>	
	<b>Carswell, E.L.; Hayes, D.; Henderson, K.W.; Kerr, W.J.</b>	
PO12		64
	<i>CHIRAL BASE-MEDIATED INTRODUCTION OF MULTIPLE ELEMENTS OF CHIRALITY AROUND AN AROMATIC CORE</i>	
	<b>Castaldi, M.P.; Gibson, S.E.</b>	

---

<b>PO13</b>		<b>65</b>
	<i>ENANTIOSELECTIVE ALLYLATION OF ALKYL GLYOXYLATES CATALYZED BY (SALEN)CR(III) COMPLEXES</i>	
	<b>Chaladaj, W.; Kwiatkowski, P.; and Jurczak, J.</b>	
<b>PO14</b>		<b>66</b>
	<i>PALLADIUM-CATALYZED DESULFITATIVE CROSS-COUPPLING REACTIONS OF SULFONYL CHLORIDES WITH ALKENES, ALKYNES AND ORGANOBORONS</i>	
	<b>Srinivas Reddy Dubbaka and Pierre Vogel</b>	
<b>PO15</b>		<b>67</b>
	<i>BIARYLS AND C-GLYCOSIDES THROUGH DESULFITATIVE STILLE AND CARBONYLATIVE STILLE CROSS-COUPPLINGS OF THE CORRESPONDING ORGANOTIN AND TINGLYALS WITH SULFONYL CHLORIDES</i>	
	<b>Srinivas Reddy Dubbaka, Peter Steunenberg, and Pierre Vogel</b>	
<b>PO16</b>		<b>68</b>
	<i>RAPID AND VERSATILE SYNTHESIS OF FUNCTIONALIZED POLYHYDROXYLATED FRAGMENTS</i>	
	<b>Dubost Christophe, Leroy Bernard and Marko Istvan</b>	
<b>PO17</b>		<b>69</b>
	<i>COMBINED ORGANOCATALYTIC ALDOL REACTIONS AND METAL-MEDIATED ALLYLATIONS</i>	
	<b>Erkkilä, A.; Pihko, P. M.; Källström, S.; Leino, R.</b>	
<b>PO18</b>		<b>70</b>
	<i>TOTAL SYNTHESIS OF THE AURISIDES</i>	
	<b>Florence, G. J.; Paterson, I.; Heimann, A. C.; and Mackay, A. C.</b>	
<b>PO19</b>		<b>71</b>
	<i>NEW ACCESS TO LONG-CHAIN POLYKETIDES AND SPIROKETALS BY REACTIONS OF ELECTRON RICH DIENES WITH ALLYLSILANES OR ENOXSILANES</i>	
	<b>Fonquerne F.; Vogel P.</b>	
<b>PO20</b>		<b>72</b>
	<i>CHIRAL BICYCLIC DERIVATIVES OF (+)-3-CARENE WITH BIOLOGICAL ACTIVITY</i>	
	<b>Frackowiak, B.; Lochynski, S.</b>	
<b>PO21</b>		<b>73</b>
	<i>SYNTHESIS OF NEW AMINO ACIDS RIGIDIFIED BY GEM-DIMETHYLCYCLOPRPYL RING</i>	
	<b>Frackowiak, B.; Librowski, T.; Lochynski, S.</b>	
<b>PO22</b>		<b>74</b>
	<i>SYNTHESIS OF NEW HYDRAZONE DERIVATIVES AS POTENTIAL HOLE-TRANSPORTING MATERIALS</i>	
	<b>V. Getautis; A. Stanisaukaite; M. Daskeviciene; T. Malinauskas; V. Gaidelis; V. Jankauskas; J. Sidaravicius; Z. Tokarski; and N. Jubran</b>	

---

<b>PO23</b>		<b>75</b>
	<i>SYNTHESIS AND MODIFICATION OF CYCLOPHANES</i>	
	<b>Gibson, S. E. and Lecci, C.</b>	
<b>PO24</b>		<b>76</b>
	<i>A CATALYTIC INTERMOLECULAR PAUSON-KHAND REACTION WITH A CYCLOBUTADIENE SURROGATE</i>	
	<b>Gibson, S.E.; Mainolfi, N.; Kalindjian, S.B.; and Wright P.T.</b>	
<b>PO25</b>		<b>77</b>
	<i>SYNTHESIS OF PLANAR CHIRAL (ARENE)TRICARBONYLCHROMIUM MONOPHOSPHINE LIGANDS AND THEIR APPLICATION IN THE ASYMMETRIC HYDROSILYLATION OF STYRENE</i>	
	<b>Gibson, S. E. and Rudd, M.</b>	
<b>PO26</b>		<b>78</b>
	<i>N-VINYLATION OF CYCLIC THIONOCARBAMATES</i>	
	<b>Girniene, J.; Tardy, S.; Chapin, T.; Dujardin, G.; Tatibouet, A.; Šačkus, A. and Rollin, P.</b>	
<b>PO27</b>		<b>79</b>
	<i>DITHIOCARBAMATE GROUP TRANSFER CYCLIZATION REACTIONS OF CARBAMOYL RADICALS UNDER "TIN-FREE" CONDITIONS</i>	
	<b>Grainger, R. S.*; Innocenti, P.</b>	
<b>PO28</b>		<b>80</b>
	<i>A NOVEL NON-COVALENT LINKING CONCEPT</i>	
	<b>Bas W.T. Gruijters, Jorge M.M. Verkade, Floris L. van Delft and Floris P.J.T. Rutjes</b>	
<b>PO29</b>		<b>81</b>
	<i>NEW METHODOLOGY TO ACCESS TETRAHYDROPYRIDINES: THE AZA-SILYL-PRINS REACTION</i>	
	<b>Sebastien.J.J.Guesne, Adrian P. Dobbs</b>	
<b>PO30</b>		<b>82</b>
	<i>PALLADIUM-CATALYZED CROSS COUPLING IN THE C-3 POSITION OF AS-TRIAZINES WITH 2-METALLOPYRIDINES : SCOPE AND LIMITATION</i>	
	<b>Hajbi, Y.; Alphonse, F.-A.; Suzenet, F. and Guillaumet, G.</b>	
<b>PO31</b>		<b>83</b>
	<i>NOVEL RCM REACTIONS OF ESTER-SUBSTITUTED ENOL ETHERS; SYNTHESIS OF 3-DEOXY-2-ULOSONIC ACIDS</i>	
	<b>Hekking, K.F.W.; Moelands, M.A.H.; Van Delft, F.L. and Rutjes, F.P.J.T.</b>	
<b>PO32</b>		<b>84</b>
	<i>INDOLE ALKALOID SYNTHESIS BY ANIONIC POLYCYCLISATION</i>	
	<b>Heureux, N. and Markó, I.E.*</b>	

---

<b>PO33</b>		<b>85</b>
	<i>SYNTHESIS AND ANTICANCER ACTIVITY OF OXIMES DERIVED FROM 5-SILYL(GERMYL) SUBSTITUTED THIOPHENE- AND FURAN-2-CARBOXYALDEHYDES</i>	
	<b>L. Ignatovich, I. Shestakova, I. Sleiksha, E. Lukevics</b>	
<b>PO34</b>		<b>86</b>
	<i>CONFORMATIONALLY RESTRICTED PEPTIDES FROM ACETYLENIC AMINO ACIDS</i>	
	<b>Maarten IJsselstijn, Floris L. van Delft, Hans E. Schoemaker and Floris P. J. T. Rutjes</b>	
<b>PO35</b>		<b>87</b>
	<i>MPA IN THE DETERMINATION OF THE ABSOLUTE CONFIGURATION OF VICINAL DIOLS BY NMR SPECTROSCOPY</i>	
	<b>Ilmarinen, K.; Pehk, T.; and Lopp, M.</b>	
<b>PO36</b>		<b>88</b>
	<i>A PRACTICAL ASYMMETRIC SYNTHESIS OF (S) AND (R)-2-METHYL-5-OXOTETRAHYDROFURAN CARBOXYLIC ACIDS</i>	
	<b>Raissa Jäälaid, Anne Pajua, Margus Eek*, Margus Loppa</b>	
<b>PO37</b>		<b>89</b>
	<i>INSECTICIDAL PIPERIDINES: FROM A HYPOTHETICAL PHARMACOPHORE TO THE SYNTHESIS OF NEW ACTIVE COMPOUNDS</i>	
	<b>Jeanguenat, A.; Jacob, O.; Farooq, S.; Trah, S.; and Flury, T.</b>	
<b>PO38</b>		<b>90</b>
	<i>ENDEAVOURS TOWARDS A COMPLETELY REGIOSELECTIVE PAUSON KHAND REACTION</i>	
	<b>Kerr, W. J.; Powell, L.; and Russell, C. J.</b>	
<b>PO39</b>		<b>91</b>
	<i>METAL REDUCTION OF KETOXIMES IN PRESSURIZED VESSEL</i>	
	<b>Dr. Laszlo Kovacs</b>	
<b>PO40</b>		<b>92</b>
	<i>GREEN ONE-POT MULTI-COMPONENT SYNTHESIS OF 2,3-DIHYDRO-7H-THIAZOLO[3,2-A]PYRIDINE-3-CARBOXAMIDES</i>	
	<b>Krauze A.; Viļums M.; Sīle L.; Beļakovs S.; Duburs G.</b>	
<b>PO41</b>		<b>93</b>
	<i>ASYMMETRIC TRANSFER HYDROGENATION OF AROMATIC KETONES BY RH/BIMORPHOLINE COMPLEXES</i>	
	<b>Kriis, K.; Kanger, T.; Lopp, M.</b>	
<b>PO42</b>		<b>94</b>
	<i>DIRECT CATALYTIC ASYMMETRIC MANNICH-TYPE REACTION OF HYDROXYKETONE USING A <math>Et_2Zn</math>/LINKED-BINOL COMPLEX: SYNTHESIS OF EITHER ANTI- OR SYN-<math>\beta</math>-AMINO ALCOHOLS</i>	
	<b>Naoya Kumagai; Takamasa Yoshida; Hiroyuki Morimoto; Shigeaki Matsunaga; and Masakatsu Shibasaki</b>	

PO43	95
<i>APPLICATION OF (SALEN)CR(III) AND (SALEN)CO(II) COMPLEXES IN THE ENANTIOSELECTIVE SYNTHESIS OF 3,6-DIHYDRO-2H-PYRANS</i>	
<b>Kwiatkowski, P.; Wojaczyńska, E.; Chaladaj, W.; and Jurczak, J.</b>	
PO44	96
<i>CLEAVAGE OF CARBAMATES IN MILD CONDITIONS BY TETRABUTYLAMMONIUM FLUORIDE</i>	
<b>Lefoix, M.; Jacquemard, U.; Bénéteau, V.; Routier, S.; Coudert, G.; and Mérour, J-Y.</b>	
PO45	97
<i>DIELS-ALDER REACTIONS OF POLYMER-SUPPORTED DIENES WITH REACTIVE DIENOPHILES</i>	
<b>Leikoski, Tuomo; Malmi, Emilii; and Yli-Kauhaluoma, Jari</b>	
PO46	98
<i>1,4-BUTANEDIOL REACTIVITY IN THE PRESENCE OF COBALT- AND COPPER-BASED CATALYSTS</i>	
<b>Leite L., Stonkus V., Edolfa K., Ilieva L., Zicmanis A., Ionescu S., Munteanu G., Plyasova L., Zaikovskii V.</b>	
PO47	99
<i>SYNTHESIS OF FLUOROALKYL SUBSTITUTED HETEROCYCLES VIA REACTIONS OF HETEROCYCLIC N-OXIDES WITH PERFLUOROPROPENE AS NUCLEOPHILIC AND ELECTROPHILIC REAGENT</i>	
<b>R. Loska, M. Mąkosza</b>	
PO48	100
<i>LITHIATION OF ACETOPHENONE KETALS: A ROUTE TO BENZANNELATED HETEROCYCLES</i>	
<b>Lukacs, Gy.; Porcs-Makkay, M.; Simig, Gy.; Mezei, T.</b>	
PO49	101
<i>HOLE-TRANSPORTING GLASS-FORMING 3,3'-DICARBAZYL-BASED HYDRAZONES</i>	
<b>R.Lygaitis, J.V.Grazulevicius, V.Gaidelis, V.Jankauskas, J.Sidaravicius, Z.Tokarski, N.Jubran</b>	
PO50	102
<i>CATALYTIC ASYMMETRIC MICHAEL REACTION OF <math>\beta</math>-KETO ESTERS: EFFECTS OF THE LINKER HETEROATOM IN LINKED-BINOL</i>	
<b>Keisuke Majima, Ryo Takita, Takashi Ohshima, and Masakatsu Shibasaki</b>	
PO51	103
<i>SYNTHESIS OF TETRAHYDROFURANS FROM PRECURSORS OF <math>\gamma,\delta</math>-EPOXY-CARBANIONS</i>	
<b>Mąkosza, M.; Barbasiewicz, M.; Krajewski, D.</b>	

<b>PO52</b>	<i>EFFECTS OF SUBSTITUENTS ON ACTIVITY OF NITROARENES IN REACTIONS WITH CARBANIONS</i>	<b>104</b>
	<b>Małosza, M.*; Kwast, S. and Blazej B.</b>	
<b>PO53</b>	<i>ASYMMETRIC CATALYSIS EMPLOYING CHIRAL PYRIDINE-OXAZOLINES</i>	<b>105</b>
	<b>Malkov, A. V.*; Liddon, A.; Kocovsky, P*</b>	
<b>PO54</b>	<i>BENZ[5,6]AZEPINO[2,3-b]INDOLES</i>	<b>106</b>
	<b>Martynaitis, V.; Dumciute. J.; Sackus, A.</b>	
<b>PO55</b>	<i>SYNTHESIS AND PROPERTIES OF 4-ALKYNYLPYRROLO[2,3-D]PYRIMIDINES</i>	<b>107</b>
	<b>Masevicius, V.; Tumkevicius, S.</b>	
<b>PO56</b>	<i>9-(4-METHOXYPHENYL) CARBAZOLYL-CONTAINING HYDRAZONES FOR OPTOELECTRONIC APPLICATIONS</i>	<b>108</b>
	<b>A. Matoliukstyte, J. V. Grazulevicius, V. Gaidelis, V. Jankauskas, E. Montrimas, Zbig Tokarski, Nusrallah Jubran</b>	
<b>PO57</b>	<i>CATALYTIC ASYMMETRIC 1,4-ADDITION REACTIONS USING <math>\alpha,\beta</math>-UNSATURATED N-ACYLPYRROLES AS MONODENTATE ESTER SURROGATES</i>	<b>109</b>
	<b>Matsunaga, S.; Kinoshita, T.; Okada, S.; Harada, S.; and Shibasaki, M.*</b>	
<b>PO58</b>	<i>CONNECTIVE TOTAL SYNTHESIS OF SPIROVETIVANES: TOTAL SYNTHESIS OF AGAROSPIROL, HINESOL AND A-VETISPIRENE</i>	<b>110</b>
	<b>Maulide, N.; Vanherck, J.-C.; and Markó, I.E.*</b>	
<b>PO59</b>	<i>TOTAL SYNTHESIS OF THE BIOACTIVE MARINE MACROLIDE (-)-DICTYOSTATIN</i>	<b>111</b>
	<b>Meyer, A.; Britton, R.; Delgado, O.; Poullennec, K. G.; Paterson, I.</b>	
<b>PO60</b>	<i>SYNTHESIS OF 1-ARYL-4-(1,3,4-OXADIAZOL-2-YL)-2-PYRROLIDINONES</i>	<b>112</b>
	<b>M. Mickevičius, Z.J. Beresnevičius, V. Mickevičius</b>	
<b>PO61</b>	<i>SYNTHESIS, <sup>13</sup>C NMR SPECTRA AND COMPUTER MOLECULAR MODELING IN THE STRUCTURE EXAMINATION OF N-(SUBSTITUTED PHENYL)-<math>\beta</math>-ALANINES</i>	<b>113</b>
	<b>Mikulskiene, G.; Kantminiene, K.; and Beresnevičius, Z.J.</b>	

<b>PO62</b>		<b>114</b>
	<i>MICROWAVE ASSISTED SOLVENT FREE SYNTHESIS OF A QUINOLINE-3,4-DICARBOXIMIDE LIBRARY ON INORGANIC SOLID SUPPORTS</i>	
	<b>Mortoni, A.; Martinelli, M.; Regalia, N.; Piarulli, U.; Gagliardi, S.</b>	
<b>PO63</b>		<b>115</b>
	<i>GENERATION OF ARYLZINC SPECIES FROM ARYL BROMIDES AND ARYL CHLORIDES VIA GRIGNARD REAGENTS UNDER MICROWAVE CONDITIONS</i>	
	<b>Mutule, I.; Suna, E.</b>	
<b>PO64</b>		<b>116</b>
	<i>INVESTIGATION OF THE SYNTHESIS OF HYDROXYLATED CYCLOPENTANEDIONES</i>	
	<b>Nüidu, A.; Paju, A.; Eek, M.; Kanger, T.; Pehk, T.; Lopp, M.</b>	
<b>PO65</b>		<b>117</b>
	<i>SONOGASHIRA COUPLING OF ARYL HALIDES CATALYZED BY PALLADIUM ON CHARCOAL</i>	
	<b>Zoltan Novak, Andras Kotschy, Andras Szabó, József Répasi</b>	
<b>PO66</b>		<b>118</b>
	<i>A SHORT ENANTIOSELECTIVE SYNTHESIS OF HOMOCITRIC ACID <math>\gamma</math>-LACTONE AND 4-HYDROXYHOMOCITRIC ACID <math>\gamma</math>-LACTONES</i>	
	<b>Anne Paju, Tõnis Kanger, Tõnis Pehk, Margus Eek, Margus Lopp*</b>	
<b>PO67</b>		<b>119</b>
	<i>STUDIES TOWARDS THE SYNTHESIS OF C6-DEOXYAMINOSUGARS</i>	
	<b>Mikko Passiniemi; Ari M.P. Koskinen*</b>	
<b>PO68</b>		<b>120</b>
	<i>GEM-DIFLUOROVINYL DERIVATIVES AS INSECTICIDES AND ACARICIDES</i>	
	<b>Thomas Pitterna; Manfred Böger; and Peter Maienfisch</b>	
<b>PO69</b>		<b>121</b>
	<i>ENANTIOSELECTIVE AMINATIONS WITH CHIRAL BASES</i>	
	<b>Pohjakallio, A.; Pihko, P. M.</b>	
<b>PO70</b>		<b>122</b>
	<i>SYNTHESIS OF 1-METHYLBICYCLO[3.3.0]OCTANE-3,4,8-TRIONE</i>	
	<b>Raudla, K.; Kanger, T.; Pehk, T.; Lopp, M.</b>	
<b>PO71</b>		<b>123</b>
	<i>TWO CYCLIZATION DIRECTIONS OF N-[4-(1,2-DICARBOXYETHYL)AMINO]PHENYLASPARTIC ACID</i>	
	<b>Rutkauskas, K.; Beresnevičius, Z.J.</b>	
<b>PO72</b>		<b>124</b>
	<i>EXAMINATION OF SOME <math>\beta</math>-LACTAM RING TRANSFORMATIONS</i>	
	<b>Attila Sapi, József Fetter</b>	

<b>PO73</b>		<b>125</b>
	<i>DEVELOPMENT OF NOVEL ANIONIC POLYCYCLISATION CASCADE REACTIONS</i>	
	<b>Hermant Sébastien, Istvan E. Markó*</b>	
<b>PO74</b>		<b>126</b>
	<i>HOMOCHIRAL BENZYLAMINES AS ASYMMETRIC PROTON DONORS</i>	
	<b>Shabashov, D.; Suna, E.</b>	
<b>PO75</b>		<b>127</b>
	<i>TOWARDS THE TOTAL SYNTHESIS OF CALLIPELTOSIDE A</i>	
	<b>Shaw, D.M.; Gaunt, M.J.; and Ley S.V.</b>	
<b>PO76</b>		<b>128</b>
	<i>ANTICANCER PROPERTIES OF NEW AMINOPHOSPHONATE DERIVATIVES</i>	
	<b>Siencyzk, M.; Oleksyszyn, J.; and Marcinkowska A.</b>	
<b>PO77</b>		<b>129</b>
	<i>SYNTHESIS OF 4-SUBSTITUTED 2-OXOBUTENOIC ACID SALTS AND ESTERS</i>	
	<b>V. Slavinska, Dz. Sile, M. Katkevitch, G. Chipens, K. Venteris, G. Rosenthal, E. Lukevics</b>	
<b>PO78</b>		<b>130</b>
	<i>APPLICATION OF OXAZOLONES IN THE SYNTHESIS OF DEHYDROAMINO ACIDS AND THEIR PEPTIDES</i>	
	<b>V. Slavinska, Dz. Sile, G. Chipens, G. Rosenthal, J. Balodis, E. Lukevics</b>	
<b>PO79</b>		<b>131</b>
	<i>LIQUID PHASE OXIDATION OF 2-HYDROXY- 4-PHENYLBUTANOIC ACID ETHYL ESTER</i>	
	<b>V. Slavinska, Dz. Sile, G. Rosenthal, E. Lukevics</b>	
<b>PO80</b>		<b>132</b>
	<i>LIQUID PHASE OXIDATION OF SOME FURAN COMPOUNDS</i>	
	<b>V. Slavinska, Dz. Sile, N. Saldabola, A. Cimanis</b>	
<b>PO81</b>		<b>133</b>
	<i>THE SYNTHESIS OF 5,7-DISUBSTITUTED QUINAZOLINEDIONES VIA A ROOM TEMPERATURE NUCLEOPHILIC DISPLACEMENT OF FLUORINE WITH GRIGNARD REAGENTS</i>	
	<b>Mark Stefaniak</b>	
<b>PO82</b>		<b>134</b>
	<i>SYNTHETIC DESIGN OF CHIRAL SUPRAMOLECULAR STRUCTURES BASED ON FUSED BICYCLIC AND AZAINDOLE FRAMEWORKS</i>	
	<b>Stončius, S.; Berg, U.; Wärnmark, K.; Butkus, E.</b>	
<b>PO83</b>		<b>135</b>
	<i>3,4-HETEROANNELATED COUMARINES</i>	
	<b>I.Strakova, A.Strakovs, S.Belyakov, M.Petrova</b>	

---

<b>PO84</b>		<b>136</b>
	<i>REACTIONS OF AZIRIDINE-2-CARBOXYLATES AND CARBOXAMIDES WITH LITHIUM BASES</i>	
	<b>Boriss Strumfs, Peteris Trapencieris</b>	
<b>PO85</b>		<b>137</b>
	<i>LITHIATION OF 4-CYANOBENZOIC ACID DERIVATIVES</i>	
	<b>Stupnikova S.</b>	
<b>PO86</b>		<b>138</b>
	<i>DEVELOPMENT OF CATALYTIC ASYMMETRIC REISSERT REACTIONS</i>	
	<b>Masato Suzuki, Eiko Ichikawa, Kazuo Yabu, Motomu Kanai, Masakatsu Shibasaki</b>	
<b>PO87</b>		<b>139</b>
	<i>SOLID SUPPORTED MÜNCHNONES: A LIBRARY SYNTHESIS OF 1,2,4-TRIAZOLES</i>	
	<b>Swapan, K. S. and Jari, Y-K.*</b>	
<b>PO88</b>		<b>140</b>
	<i>STUDIES TOWARDS THE TOTAL SYNTHESIS OF SPONGISTATIN 1</i>	
	<b>Tanner, H.R.; Gaunt, M.J.; Jessiman, A.J.; Scolaro, A.; Kawahara S.; and Ley,S.V.</b>	
<b>PO89</b>		<b>141</b>
	<i>NOVEL SELECTIVE METHODS IN THE SYNTHESIS OF ACIDIC AND ARYL-SUBSTITUTED HYDRAZINES</i>	
	<b>Tshubrik, O.; Bredihhin, A.; Mäeorg, S.; Mäeorg, U.</b>	
<b>PO90</b>		<b>142</b>
	<i>FIVE-MEMBERED HETEROCYCLIC COMPOUNDS FROM DI- AND TETRAHYDRAZIDES OF AMINO ACIDS</i>	
	<b>Tumosiene, I.; Novikovaite, V.; Beresnevičius, Z. J.</b>	
<b>PO91</b>		<b>143</b>
	<i>NEW ASYMMETRIC SYNTHESIS OF LONG-CHAIN POLYPROPIONATE FRAGMENTS BY REACTION OF 1,3-DIOXY-1,3-DIENES AND ALLYLSILANES: UMPOLUNG WITH SULFUR DIOXIDE</i>	
	<b>Maris Turks and Pierre Vogel*</b>	
<b>PO92</b>		<b>144</b>
	<i>EFFICIENT SYNTHESIS OF RIFAMYCINE S, BACONIPYRONE A AND BRASILINOLIDE A FRAGMENTS BY NEW SULFUR DIOXIDE INDUCED CARBON-CARBON BOND FORMATION</i>	
	<b>Maris Turks and Pierre Vogel*</b>	
<b>PO93</b>		<b>145</b>
	<i>SYNTHETIC STUDIES OF GARSUBELLIN A AND HYPERFORIN USING NOVEL CATALYTIC ASYMMETRIC DIELS-ALDER REACTION</i>	
	<b>Hiroyuki Usuda, Akiyochi Kuramochi, Motomu Kanai, and Masakatsu Shibasaki</b>	

---

<b>PO94</b>		<b>146</b>
	<i>AGING OF ACETYL NITRATE SOLUTION IN EXCESS OF ACETIC ANHYDRIDE DURING STORAGE</i>	
	<b>K.Venteris, V.Slavinska</b>	
<b>PO95</b>		<b>147</b>
	<i>SYNTHESIS OF IMMOBILISED DIHYDROPYRIDINE ANTIOXIDANTS FOR USE IN FOODS</i>	
	<b>Vigante, B.; Čekavičius B.; Sobolev, A.; Duburs G.</b>	
<b>PO96</b>		<b>148</b>
	<i>INHIBITORS OF ADP-RIBOSYLATING BACTERIAL TOXINS BASED ON OXACARBENIUM ION CHARACTER AT THEIR TRANSITION STATES</i>	
	<b>Zhou, G.-C.; Parikh, S.L.; Schramm, V.L.; Evans, G.B.; Tyler, P.C.; Zubkova, O.V.; Furneaux, R.H.; and Benjes, P.A.</b>	
<b>PO97</b>		<b>149</b>
	<i>THE SYNTHESIS OF PYRAZOLE DERIVATIVES FROM CYCLOHEXENECARBOXYLIC ACID N-(2,2-DIETHOXYCARBONYLETHENYL)HYDRAZIDES</i>	
	<b>D.Zicane, I.Ravina, Z.Tetere</b>	
<b>PO98</b>		<b>150</b>
	<i>SYNTHESIS OF ISOMERIC 2-OXAADAMANTANE-4,8-DIOLS</i>	
	<b>Žilinskas, A.; Butkus, E.</b>	
<b>PO99</b>		<b>151</b>
	<i>NEW ROUTE TOWARD THE ASYMMETRIC SYNTHESIS OF MACROCYCLIC POLYOLS AND POLYHYDROXYMACROLACTAMS</i>	
	<b>Gérald Coste, Sandrine Gerber-Lemaire and Pierre Vogel</b>	
<b>PO100</b>		<b>152</b>
	<i>EXPLORING PUBLIC LITERATURE FOR NEW DEVELOPMENTS IN DRUG DISCOVERY</i>	
	<b>Paul Peters</b>	

---