



PL5 Pavel Mykhailiuk PL2 Stefan Schunk PL8 Nuno Maulide PL1 Frank Glorius Welcome reception PL3 Ryan Shenvi PL7 Peter Nielsen PL4 Maris Turks PL6 Brian Stoltz Registration Registration Excursion Opening Coffee Coffee Lunch Photo Monday July 4 16.30 - 17.30 18.00 - 20.00 14.00 - 15.00 15.00 - 16.0008.30 - 09.00 09.00 - 10.0010.00 - 10.3012.00 - 14.00 16.00 - 16.3008.00 - 09.0010.30 - 11.3012.00 - 14.0014.00 - 15.0015.00 - 16.00 16.00 - 16.3016.30 - 17.30 From 12:00 11.30

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Poster session I (odd numbered poster presenters) City Tour (from the Conference Venue)

17.30 - 18.30 18.30 - 20.00 Welcome and BOS updates PL10 Suzanne Blum PL9 Riina Aav 09.00 - 10.0010.00 - 11.00 08.30 - 09.00

Coffee 11.00 - 11.30 11.30 - 12.30

Balticum Organicum

Syntheticum

3-6 July 2016 Riga, Latvia

PL11 Stephen Dalby Lunch 12.30 - 14.00

PL13 John Sutherland PL12 Sheng Ding 14.00 - 15.00 15.00 - 16.00

Coffee 16.00 - 16.3016.30 - 17.30

PL14 Sarah Reisman

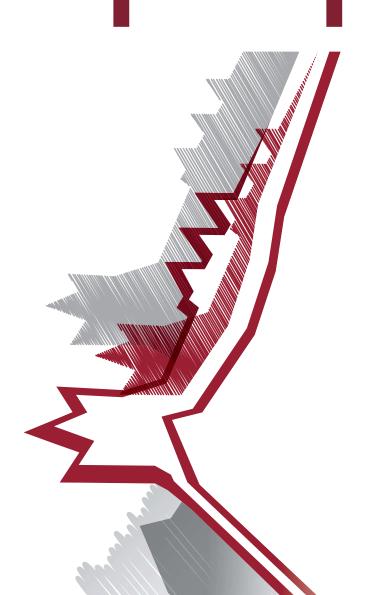
Banquet (departure 18:30 from the Conference Venue) Poster session II (even numbered poster presenters) 17.30 - 18.30 19.00 - 22.00

Wednesday July 6

PROGRAM AND ABSTRACTS

2016 RIGA





CHALLENGING DESIGN AND SYNTHESIS OF INHIBITORS OF CARBONIC ANHYDRASES

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Carbonic anhydrases (CA) are zinc containing enzymes which catalyze reversible hydration and transport of carbon dioxide and, along with other functions, provide pH regulation in cells. Among 15 isoforms of human CA special attention is dedicated to inhibition of tumor associated CA IX and CA XII, where good inhibitory activities and selectivities for series of sulfocoumarin have been recently demonstrated. We have found interesting design of saccharin derivatives which was driven by protein-inhibitor crystallization experiment. CA IX-thiophene sulfonamide complex X-ray have opened opportunities for the design and synthesis on novel CA IX selective sulfonamides.

References

- 1. Alterio, V.; Di Fiore, A.; D'Ambrosio, K.; Supuran, C. T.; De Simone, G. Chem. Rev. 2012, 112, 4421.
- 2. Tars, K.; Vullo, D.; Kazaks, A.; Leitans, J.; Lends, A.; Grandane, A.; Zalubovskis, R.; Scozzafava, A.; Supuran C. T. *J. Med. Chem.* **2013**, *56*, 293; Grandane, A.; Tanc, M.; Zalubovskis, R.; Supuran, C. T. *Bioorg. Med. Chem.* **2014**, *22*, 1522; Grandane, A.; Tanc, M.; Zalubovskis, R.; Supuran, C. T. *Bioorg. Med. Chem. Lett.* **2014**, *24*, 1256.
- 3. Ivanova, J.; Leitans, J.; Tanc, M.; Kazaks, A.; Zalubovskis, R.; Supuran, C. T.; Tars, K. Chem. Commun. 2015, 51, 7108.
- 4. Leitans, J.; Kazaks, A.; Balode, A.; Ivanova, J.; Žalubovskis, R.; Supuran, C.T.; Tars, K. J. Med. Chem. 2015, 58, 9004.