Michael J. Sofia, Ph.D. is Awarded the 2016 IUPAC-Richter Prize

The 2016 IUPAC-Richter Prize in Medicinal Chemistry has been awarded to Dr. Michael J. Sofia. Dr. Sofia received this award in recognition of his outstanding creative contributions to the invention, discovery, and development of the novel antiviral drug sofosbuvir (Sovaldi™) as a treatment for the cure of hepatitis C virus infection. It was approved in 2013. This new drug and its combinations provide high cure rates in infected people.

The IUPAC-Richter Prize, comprising a plaque and a check for USD 10,000, will be presented at the XXIV European Federation of Medicinal Chemistry International Symposium in Manchester, UK (28 August - 1 September 2016). The plaque will be signed by Professor Natalia Tarasova, President of IUPAC, Erik Bogsch, Chief Executive Officer of Gedeon Richter plc (Budapest, Hungary), and János Fischer, Chair of the IUPAC-Richter Prize selection committee. Dr. Michael J. Sofia will present a lecture at this Symposium and also at the American Chemical Society's 34th National Medicinal Chemistry Symposium in Chicago, IL (26-29 June 2016).

Dr. Sofia studied chemistry at the Cornell University and received his Ph.D. in organic chemistry from the University of Illinois, working with Professor John Katzenellenbogen. He was an NIH postdoctoral fellow in synthetic organic chemistry at Columbia University with Professor Gilbert Stork. He started his career in pharmaceutical research at E.R. Squibb & Co., continued his research work at Eli Lilly & Co., Intercardia, and Bristol-Myers Squibb, and was Sr. Vice President of Chemistry at Pharmasset until Pharmasset's acquisition by Gilead in 2012. He pioneered the development of nucleoside and nucleotide prodrugs for the treatment of the hepatitis C virus. Michael J. Sofia is currently Chief Scientific Officer at Arbutus Biopharma and holds a professorship at the Baruch S. Blumberg Institute for Hepatitis Research.

Previous IUPAC-Richter Prizes were awarded to Malcolm F.G. Stevens in 2006, Jan Heeres in 2008, Arun K. Ghosh in 2010, Stephen Hanessian in 2012, and Helmut Buschmann in 2014.

Gedeon Richter Plc. (www.richter.hu), headquartered in Budapest/Hungary, is a major pharmaceutical company in Central Eastern Europe, with an expanding direct presence in Western Europe. Richter's consolidated sales were approximately EUR 1.2 billion (US$ 1.3 billion) in 2015, while its market capitalization amounted to EUR 3.3 billion (US$ 3.6 billion) at the end of December 2015. The product portfolio of Richter covers almost all important therapeutic areas, including gynaecology, central nervous system, and cardiovascular areas. Having the largest R&D unit in Central Eastern Europe, Richter's original research activity focuses on CNS disorders. With its widely acknowledged steroid chemistry expertise, Richter is a significant player in the female healthcare field worldwide. Richter is also active in biosimilar product development.

Green Chemistry for Life Grants Awarded

On 14 December 2015, UNESCO (the United Nations Educational, Scientific and Cultural Organisation) awarded leading chemistry researchers from around the world with grants to support research in the field of green chemistry under a joint PhosAgro/UNESCO/IUPAC Green Chemistry for Life Grant Programme. The event took place during the 4th UN Secretary-General's Scientific Advisory Board Meeting and the Congress of UNESCO Chairs in Saint Petersburg.

The grant award ceremony was attended by UNESCO Director-General Irina Bokova, Secretary-General of the Commission of the Russian Federation for UNESCO Grigory Ordzhonikidze, President of the Russian Academy of Sciences Vladimir Frolov, St. Petersburg Governor Georgy Poltavchenko, Rector of the St. Petersburg National Mineral Resources University Vladimir Litvinenko, President of IUPAC and Director of the Institute for Chemistry and Sustainable Development of the D. Mendeleev University of Chemical Technology of Russia Natalya Tarasova, Member of the Commission of the Russian Federation for UNESCO Andrey Guryev, UNESCO Assistant Director-General for Natural Sciences Flavia Schlegel, and IUPAC Treasurer Professor John Corish of the Trinity College Dublin School of Chemistry.

The Green Chemistry for Life programme was launched on 29 March 2013 at the UNESCO headquarters in Paris, France. The goal of the partnership was to support talented young scientists engaged in green chemistry projects aimed at protecting the environment, creating energy-efficient processes, and

integrating environmentally-friendly technologies with innovative new ideas.

In 2015, the international scientific jury reviewed 119 applications for grants, and awarded the six best applicants: Dr. Daniele Leonori from Italy, Dr. Alexander Bissember from Australia, Dr. Natalia Quici from Argentina, Dr. Svilen Simeonov from Bulgaria, Dr. Mehdi Mohammadi from Iran, and Dr. Allan Prior from South Africa.

"In today's world, science and basic research need as much support as they can get", said Dr. Alexander Bissember, one of the grant recipients, from Australia. "The fact that this programme was developed specifically to support researchers from around the world at the start of their careers makes it especially useful and important. I hope that other companies follow PhosAgro's example and start to support research aimed at developing 'green' chemical processes."

"The time for green chemistry is now" said Andrey Guryev, PhosAgro CEO, "we have the opportunity to influence the future of our planet with the help of important new scientific research. I hope that every one of the laureates will be successful at developing their projects in a way that opens up new opportunities for economic growth combined with protection of the environment for future generations. Finding real-world applications for these projects, I believe, will also support global food security." He added "This programme is an important sign of solidarity between the mineral fertilizers industry and the scientific community, which is supported by PhosAgro's continued active cooperation with UNESCO and IUPAC on the international Green Chemistry for Life project."

"This program is 'a marriage made in heaven'", said the IUPAC Treasurer, Professor John Corish. "The three collaborating institutions are very well matched. PhosAgro very generously provides the funding. UNESCO has tremendous contacts around the world in the basic sciences and IUPAC, in which I serve, provides the essential scientific expertise."

UNESCO Assistant Director-General for Natural Sciences Flavia Schlegel said: "PhosAgro, well-known for its environmental and social awareness, is the first Russian industrial company in the history of UNESCO to have proposed and sponsored an initiative to promote green chemistry. It is doing so through the PhosAgro/UNESCO/IUPAC Partnership in Green Chemistry for Life, for which it has generously provided US$ 1,400,000 for a 5-year programme of grants to be awarded for promising research projects proposed by young scientists. The programme, led by an International Scientific Jury, seeks to identify the best young researchers and help them to bring their excellent scientific ideas to fruition. The strategy of the PhosAgro/UNESCO/IUPAC Partnership in support of young scientists will without doubt bring substantial returns, which are particularly called for in the implementation of the 2030 Agenda for Sustainable Development and its 17

Awards Presentation in the Main hall of National Mineral Resources University (Mining University). From left to right: Grigory Ordzhonikidze, Secretary-General of the Russian Commission for UNESCO; Vladimir Litvinenko, Rector of the St. Petersburg National Mineral Resources University: Mohammadi Mehdi, grantee from Iran; Svilen Simeonov, grantee from Bulgaria; Pietro Tundo, chair of the IUPAC SubCommittee on Green Chemistry; Daniele Leonori, grantee from Italy; Natalia Quici, grantee from Argentina; Irina Bokova, UNESCO Director-General; Andrei Guryev PhosAgro CEO; Alexander Bissember, grantee from Australia; Allan Prior, grantee from South Africa; John Corish, IUPAC Treasurer; Nicole Moreau, member of the ICSU Executive Committee and IUPAC past President, and Natalia Tarasova, Director of the Institute for Chemistry and Sustainable Development of the D. Mendeleev University of Chemical Technology of Russia and IUPAC President.

Sustainable Development Goals."

For related releases and access to PhosAgro 2015 newspaper specially prepared for the event, see www.iupac.org/news/news-detail/article/green-chemistry-for-life-grants-awarded.html

PhosAgro/UNESCO/IUPAC Green Chemistry for Life Grant Programme

Research in green chemistry and allied areas in biochemistry, geochemistry, biotechnology, ecology and healthcare give young scientists ample opportunity to demonstrate their inventiveness and provide important input to sustainable development. With this in mind, the Green Chemistry for Life Project was launched in 2013 by UNESCO's International Basic Sciences Programme (IBSP) and PhosAgro, the largest producer of phosphate-based fertilizer in Europe, in close cooperation with the International Union of Pure and Applied Chemistry (IUPAC). The program recently completed two separate calls:

-
- the 3rd Green Chemistry research grants for young scientists, and
- the 1st Green Chemistry special grants for research projects on phosphogypsum.

The next round of applications for both programs will be announced in September 2016.

For details and update, see www.unesco.org/new/en/natural-sciences/science-technology/basic-sciences/chemistry/green-chemistry-for-life/

Fifth Polymer International-IUPAC Award Winner goes to Richard Hoogenboom

The Executive Editorial Board of Polymer International and the IUPAC Polymer Division are pleased to announce Professor Hoogenboom as the winner of the Fifth Polymer International – IUPAC award.

Richard Hoogenboom was born in 1978 in Rotterdam, The Netherlands and studied chemical engineering at the Eindhoven University of Technology (TU/e, Netherlands). In 2005, he obtained his PhD and continued working as project leader for the Dutch Polymer Institute. The final two years of this appointment were combined with a part-time position as senior product developer at Dophys Medical BV. After postdoctoral training with Martin Möller at the RWTH Aachen (Humboldt fellowship, 2008-2009) and Roeland J. M. Nolte at the Radboud University Nijmegen (NWO veni-grant, 2009-2010), he was appointed as Associate Professor at Ghent University (Belgium) in mid-2010, where he currently heads a research group on Supramolecular Chemistry (www.sc.ugent.be). His research interests include stimuli-responsive polymers, supramolecular polymers, and poly(2-oxazoline)s.

"It is an honor to announce Richard Hoogenboom as the winner of the 5th Polymer International - IUPAC Award for Creativity in Applied Polymer Science or Polymer Technology. Professor Hoogenboom's research is as beautiful as his home base of Ghent" said Gregory Russell, current President of the IUPAC Polymer Division. "His research focuses on the development of adaptive and responsive materials inspired by natural self-assembly processes. This research goal is pursued by combining directional supramolecular interactions with well-defined polymeric building blocks and responsive polymer structures. He has over 275 refereed publications to his name, and an h-index of over 50."

"Receiving the PI-IUPAC award is a great honor" said Hoogenboom, "and a beautiful recognition of the research of my group."

Professor Hoogenboom will receive this award and give a lecture at the World Polymer Congress (http://macro2016.org/) being held 17-21 July 2016 in the incomparable city of Istanbul. "His award lecture is sure to be one of the highlights of this flagship conference of the IUPAC Polymer Division", added Russell. "I congratulate Richard and at the same time I would like to thank Polymer International for its generous sponsorship of this award, for which the IUPAC Polymer Division is indebted/ Long may the IUPAC-PI partnership continue!"

The award includes US$ 5,000 of expenses and travel to the World Polymer Congress. Richard Hoogenboom succeeds William Dichtel (2014), Ali Khadem-