

# FLUORIDE

Quarterly Journal of The International Society for Fluoride Research Inc.

[www.fluorideresearch.org](http://www.fluorideresearch.org)

Owned & published by THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH INCORPORATED © 2017. All rights reserved.

**Editor-in-Chief:**

Dr Bruce J Spittle. Dunedin, New Zealand. E-mail: [spittle@es.co.nz](mailto:spittle@es.co.nz)

**Regional Editor for Africa:**

Professor Eli Dahi. Denmark (previously Ngongongare, Tanzania). E-mail: [elidahi@hotmail.com](mailto:elidahi@hotmail.com)

**Regional Editor for Eastern Europe:**

Professor Dariusz Chlubek. Department of Biochemistry and Chemistry, Pomeranian Medical University, Szczecin, Poland. E-mail: [dclubek@sci.pum.edu.pl](mailto:dclubek@sci.pum.edu.pl)

**Regional Editors for India:**

For papers on all aspects of fluoride: Dr Shanti Lal Choubisa. Emeritus Professor of Biotechnology, Department of Advanced Science & Technology, Nims University Rajasthan, Jaipur-303121, India. E-mail: [choubisasl@yahoo.com](mailto:choubisasl@yahoo.com)

For public health based papers: Professor Vikas K Desai. Community Medicine Department, Government Medical College (GMCS), Majura Gate, Surat, Gujarat, India – 395005. E-mail: [psmvikas@hotmail.com](mailto:psmvikas@hotmail.com)

**Regional Editor for Latin America, including Mexico, Central America, and Cuba:**

Dr Alfredo Rigalli. Rosario, Argentina. E-mail: [arigalli@unr.edu.ar](mailto:arigalli@unr.edu.ar) and [arigalli@conicet.gov.ar](mailto:arigalli@conicet.gov.ar)

**Regional Editor for the Middle East:**

Dr Amir Hossein Mahvi. Department of Environmental Health Engineering, School of Public Health and Institute for Environmental Research, Tehran University of Medical Sciences, Tehran, Iran. E-mail: [ahmahvi@yahoo.com](mailto:ahmahvi@yahoo.com)

**Regional Editor for Pakistan and Afghanistan:**

Dr Muhammad Nauman Ahmad. Department of Agricultural Chemistry, The University of Agriculture, Peshawar, Pakistan. E-mail: [drnumanahmad@aup.edu.pk](mailto:drnumanahmad@aup.edu.pk)

**Regional Editors for People's Republic of China:**

Professor Yanhui Gao. Director of the Institute for Endemic Fluoride Control, Center for Endemic Disease Control, People's Republic of China CDC. E-mail: [goayh411@163.com](mailto:goayh411@163.com)

Professor Zhi-Zhong Guan. Department of Pathology and Key Lab of Endemic and Ethnic Diseases (Guizhou Medical University), Ministry of Education, Guiyang Medical University, Guiyang, People's Republic of China. E-mail: [zhizhongguan@yahoo.com](mailto:zhizhongguan@yahoo.com)

**Associate Editors:**

Professor Emeritus Hardy Limeback. University of Toronto, Toronto, ON, Canada.

Professor Emeritus Gene W Miller. Utah State University, Logan, UT, USA.

Christopher Neurath. American Environmental Health Studies Project, Lexington, MA, USA.

Associate Professor Jashwanti D Sharma. Department of Zoology, University of Rajasthan, Jaipur, India.

Professor Dianjun Sun. Chinese Research Center for Endemic Disease Control, Harbin Medical University, Harbin, People's Republic of China.

Professor Emeritus AK Susheela. Fluorosis Research & Rural Development Foundation, Delhi, India.

Associate Professor Masashi Tsunoda. Kitasato University School of Medicine, Sagamihara, Japan.

Professor Emeritus Ming-Ho Yu. Western Washington University, Bellingham, WA, USA.

**Editorial Assistant:**

Peter Meiers. Saarbrücken, Germany.

*Fluoride* is available as a free online open access journal at [www.fluorideresearch.org](http://www.fluorideresearch.org) and the articles can be accessed by clicking on the boxes below the titles in the online table of contents for the smallest file size and press quality PDF versions, respectively.

## CONFERENCE ANNOUNCEMENT

193–197..... FIRST ANNOUNCEMENT AND CALL FOR ABSTRACTS: XXXIVTH CONFERENCE OF THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH, GUIYANG, PEOPLE'S REPUBLIC OF CHINA, OCTOBER 18–20, 2018

[smallest file size PDF](#)

[press quality PDF](#)

## EDITORIAL

198–202..... VILIFICATION IN SCIENTIFIC REVOLUTIONS  
Bruce Spittle. Dunedin, New Zealand.

[smallest file size PDF](#)

[press quality PDF](#)

## RESEARCH REPORTS

203–212..... THE PROTECTIVE PROPERTIES OF SELECTED NATURALLY OCCURRING ANTIOXIDANTS OF PLANT ORIGIN AGAINST FLUORIDE-INDUCED NEUROTOXICITY  
Marta Goschorska, Krzysztof Giewoń, Natalia Hasiór, Izabela Gutowska, Irena Baranowska-Bosiacka, Monika Ewa Rać, Dariusz Chlubek.  
Szczecin, Poland.

[smallest file size PDF](#)

[press quality PDF](#)

- 213–222..... FLUORIDE INDUCES APOPTOSIS IN MC3T3-E1 OSTEOBLASTS BY ALTERING ROS LEVELS AND MITOCHONDRIAL MEMBRANE POTENTIALS  
Xiaoyan Yan, Xiaolin Tian, Lu Wang, Wenli Zhou, Wenyang Zhang, Yi Lv, Yulan Qiu, Tong Wang. Taiyuan, Shanxi Province, and Guangzhou and Shenzhen, Guangdong Province, People's Republic of China.

[smallest file size PDF](#)

[press quality PDF](#)

- 223–234..... THE EQUILIBRIUM, KINETIC, AND THERMODYNAMIC PARAMETERS OF THE ADSORPTION OF THE FLUORIDE ION ON TO SYNTHETIC NANO SODALITE ZEOLITE  
Davoud Balarak, Ferdos Kord Mostafapour, Edris Bazrafshan, Amir Hossein Mahvi. Zahedan and Tehran, Iran.

[smallest file size PDF](#)

[press quality PDF](#)

- 235–246..... EFFECT OF SODIUM FLUORIDE ON THE STRUCTURE AND FUNCTION OF THE THYROID AND OVARY IN ALBINO RATS (*RATTUS NORVEGICUS*)  
Varsha Dhurvey, Vandana Patil, Mangala Thakare. Nagpur, India.

[smallest file size PDF](#)

[press quality PDF](#)

- 247–255..... INFLUENCE OF THE BREEDING GROUND LOCATION ON THE FLUORIDE ION LEVEL IN EGG SHELLS OF THE EUROPEAN BLACKBIRD (*TURDUS MERULA*)  
Dariusz Wysocki, Łukasz Jankowiak, Marta Cholewa, Anna Cichocka, Beata Bosiack, Irena Baranowska-Bosiacka, Izabela Gutowska, Dariusz Chlubek. Szczecin, Poland.

[smallest file size PDF](#)

[press quality PDF](#)

- 256–268..... SYNTHESIS OF NANOCITOSAN FOR THE REMOVAL OF FLUORIDE FROM AQUEOUS SOLUTIONS: A STUDY OF ISOTHERMS, KINETICS, AND THERMODYNAMICS  
Ali Naghizadeh, Habibeh Shahabi, Elham Derakhshani, Fatemeh Ghasemi, Amir Hossein Mahvi. Birjand and Tehran, Iran.

[smallest file size PDF](#)

[press quality PDF](#)

- 269–275..... TOENAIL FLUORIDE ION CONCENTRATIONS, DENTAL FLUOROSIS IN THE PRIMARY DENTITION, AND VARIOUS SOCIO-BEHAVIORAL FACTORS IN CHILDREN LIVING IN A FLUORIDATED CITY IN BRAZIL  
Cristiane Alves Paz de Carvalho, Fábio Silva de Carvalho, Larissa Tercilia Grizzo, José Roberto Pereira Lauris, Marília Afonso Rabelo Buzalaf, Sílvia Helena de Carvalho Sales Peres. Bauru, São Paulo, Brazil.

[smallest file size PDF](#)

[press quality PDF](#)

- 276–286..... AMELIORATION BY BLACK SEED (*NIGELLA SATIVA*) OIL OF HEPATO-HISTOPATHOLOGIES INDUCED IN MICE BY EXPOSURE TO THE TRI-FLUORIDATED PYRETHROID INSECTICIDE BIFENTHRIN  
Sadia Suleman, Iqra Javid, Samina Ikram, Khalida Jabeen, Afshan Mumtaz, Mehwish Nasir, Muhammad Ali Kanwal, Tahir Abbas, Khawaja Raees Ahmada. Sargodha, Pakistan .

[smallest file size PDF](#)

[press quality PDF](#)

---

### CORRECTION

In: Poureslami H, Khazaeli P, Mahvi AH, Poureslami K, Poureslami P, Haghani J, Aghaeic M. Fluoride level in the breast milk in Koohbanan, a city with endemic dental fluorosis. *Fluoride* 2016;49(4 Pt 2):485-94, the word nine was used in error instead of the word ninety. The sentence on page 491, paragraph 3, lines 1 and 2, should have read: “In the present study, the mean F concentration in the milk of the mothers with fluorosis was almost ninety times more than that of the control mothers.” The mean amount of F in the breast milk of mothers without dental fluorosis was 0.006 ppm while in the mothers with dental fluorosis it was markedly elevated at 0.550 ppm ( $p < 0.001$ ). 0.550 divided by 0.006 is 91.7. I apologize for introducing this error during my copyediting and will endeavour to be more careful in future.