

# FLUORIDE

Quarterly Journal of The International Society for Fluoride Research Inc.

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

Owned & published by THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH INCORPORATED © 2019. All rights reserved.

**Editor-in-Chief:**

Dr Bruce J Spittle. Dunedin, New Zealand. E-mail: [spittle727@gmail.com](mailto:spittle727@gmail.com) and [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, Bangladesh, Bhutan, Maldives, Myanmar, Nepal, and Sri Lanka:**

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: [1457658298@qq.com](mailto:1457658298@qq.com)

**Associate Editors:**

Professor Emeritus Hardy Limeback. University of Toronto, Toronto, ON, Canada.  
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 Andezhath K Susheela. Fluorosis Research & Rural Development Foundation, Delhi, India.  
Prof. Masashi Tsunoda. Dept. of Preventive Medicine and Public Health, National Defense Medical College, Japan.  
Professor Emeritus Ming-Ho Yu. Western

**Editorial Assistant:**

Peter Meiers. Saarbrücken, Germany.

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

## EDITORIAL

483–488..... THE IMPORTANCE OF TIMING IN FLUORIDE-INDUCED DEVELOPMENTAL NEUROTOXICITY

Bruce Spittle. Dunedin, New Zealand.

**smallest file size PDF**

**press quality PDF**

**Epub ahead of print (press quality) PDF**

## RESEARCH REPORTS

489–496..... FLUORIDE CONCENTRATION IN DENTIN OF HUMAN PERMANENT TEETH

Mirona Palczewska-Komsa, Katarzyna Barczak, Artur Kotwas, Maciej Sikora, Dariusz Chlubek, Jadwiga Buczkowska-Radlińska. Szczecin and Kielce, Poland.

**smallest file size PDF**

**press quality PDF**

**Epub ahead of print (press quality) PDF**

497–506..... FLUORIDE BIOMONITORING AROUND AN INDUSTRIAL PHOSPHATE FACTORY USING BARK AND LEAVES FROM DIFFERENT TREE SPECIES IN ARID SOUTHERN TUNISIA

Kaouthar Jeddi, Mohamed Chaieb. Sfax and Gabès, Tunisia.

**smallest file size PDF**

**press quality PDF**

**Epub ahead of print (press quality) PDF**

507–516..... CHARACTERIZATION AND EFFICACY OF FLUORIDE ELUSION OF A NOVEL GLASS IONOMER NANO ZIRCONIA SILICA HYDROXYAPATITE HYBRID MATERIAL  
Arbaz Sajjad, Wan Zaripah Wan Bakar, Dasmawati Mohamad, Thirumulu Ponnuraj Kannan. Kubang Kerian, Kelantan, Malaysia.

**smallest file size PDF**

**press quality PDF**

**Epub ahead of print (press quality) PDF**

- 517–526..... RESPONSE OF LOCAL CROPS TO HYDROGEN FLUORIDE POLLUTION EMITTED FROM BRICK KILNS IN THE VICINITY OF PESHAWAR, PAKISTAN  
Sadaf Qasim, M Nauman Ahmad, Muhammad Suleman. Peshawar, Pakistan.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 527–530..... FLUORIDE CONCENTRATION IN COMMERCIALY AVAILABLE DAIRY MILK IN IRAN  
Shamim Hajiouni, Sina Dobaradaran, Amir Hossein Mahvi, Bahman Ramavandi, Alireza Raeisi, Jörg Spitz. Bushehr and Tehran, Iran, and Schlangenbad, Germany.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 531–536..... APPLICATION OF ELECTROCHEMICAL PROCESSES FOR THE REMOVAL OF FLUORIDE FROM POLLUTED WATER  
Atieh Salem, Nezam Mirzaei, Amir Hossein Mahvi, Hossein Akbari, Zeinab Parmoozeh, Davarkhah Rabbani. Kashan and Tehran, Iran.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 537–545..... MULBERRY LEAVES AS A BIOINDICATOR OF FLUORIDE POLLUTION IN THE VICINITY OF A PHOSPHATE FERTILIZER FACTORY LOCATED IN SFAX, TUNISIA  
Imed Mezghani, Mohamed Zouari, Bechir Ben Rouina, Ferjani Ben Abdallah. Sfax, Tunisia.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 546–552..... ADSORPTION OF FLUORIDE FROM AQUEOUS SOLUTIONS BY A CHITOSAN/ZEOLITE COMPOSITE  
Amir Hossein Mahvi, Ferdos Kord Mostafapour, Davoud Balarak, Aram Dokht Khatibi. Zahedan and Tehran, Iran.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 553–561..... FLUORIDE CONTENT OF COCONUT WATER AND ITS RISK ASSESSMENT  
Sara Sadat Hosseini, Amir Hossein Mahvi, Masashi Tsunoda. Tehran, Iran, and Tokorozawa, Japan.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 562–568..... ADSORPTION OF FLUORIDE FROM AQUEOUS SOLUTION BY EUCALYPTUS BARK ACTIVATED CARBON: THERMODYNAMIC ANALYSIS  
Amir Hossein Mahvi, Ferdos Kord Mostafapour, Davoud Balarak. Tehran and Zahedan, Iran.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**
- 569–579..... REMOVAL OF FLUORIDE FROM AQUEOUS SOLUTION BY NICKEL OXIDE NANOPARTICLES: EQUILIBRIUM AND KINETIC STUDIES  
Chinenye Adaobi Igwegbe, Somayeh Rahdar, Abbas Rahdar, Amir Hossein Mahvi, Shahin Ahmadi, Artur Marek Banach. Awka, Nigeria; Zabol and Tehran, Iran; and Lublin, Poland.  
**smallest file size PDF**      **press quality PDF**      **Epub ahead of print (press quality) PDF**

## ABSTRACT

### MATERNAL FLUORIDE EXPOSURE AND IQ SCORES IN OFFSPRING

- 580..... ASSOCIATION BETWEEN MATERNAL FLUORIDE EXPOSURE DURING PREGNANCY AND IQ SCORES IN OFFSPRING IN CANADA  
Green R, Lanphear B, Hornung R, Flora D, Angeles Martinez-Mier E, Neufeld R, Ayotte P, Muckle G, Till C. Toronto, Canada.  
**smallest file size PDF**      **press quality PDF**

---

## XXXVTH ISFR CONFERENCE, TEHRAN, IRAN, OCTOBER 13–14, 2020

The 35th conference of the International Society for Fluoride Research will be hosted by Dr Amir Hossein Mahvi, Department of Environmental Health Engineering, School of Public Health and Institute for Environmental Research, Tehran University of Medical Sciences, in Tehran, Iran, on October 13–14, 2020. The officers for Conference are: Co-Presidents: Dr. Naddafi, Head of the Institute for Environmental Research, Tehran University of Medical Sciences and Dr. Akbari Sari, Head of the School of Public Health, Tehran University of Medical Sciences; Head of the Scientific Office: Dr Amir Hossein Mahvi. E-mail for Dr Mahvi: [ahmahvi@yahoo.com](mailto:ahmahvi@yahoo.com).

---