CONFERENCE ANNOUNCEMENT

185–187...... SIXTH ANNOUNCEMENT XXXIIInd ISFR CONFERENCE IN CHIANG MAI, THAILAND

EDITORIAL

188–190...... FLUORIDE, IQ, AND ADVICE ON TYPE I AND II ERRORS
Bruce Spittle. Dunedin, New Zealand.

RESEARCH REPORTS

191–198...... EFFECTS OF FLUORIDE ON EXPRESSION OF CYTOKINES IN THE HIPPOCAMPUS OF ADULT RATS

199–207...... ALTERATIONS OF APOPTOSIS AND EXPRESSIONS OF Bax AND Bcl-2 IN THE CEREBRAL CORTEXES OF RATS WITH CHRONIC FLUOROSIS

208–226...... STRUCTURAL AND ULTRA-STRUCTURAL DISORDERS IN ZIZIPHUS JUJUBA MILLER FRUITS UNDER FLUORINE STRESS
Zhi-wei Zhang, Meng Ma, Xian-qian Liu, Rui-yan Ma, Jing Liu. Shanxi, PR of China.

227–234...... TOXIC EFFECTS OF FLUORIDE ON PRIMARY LYMPHOID ORGANS AND WHITE BLOOD CELLS IN FEMALE MICE
Jing Zhao, Hongwei Wang, Erjie Tian, Faming Dong, Binhua Zhou. Luoyang, Henan, PR of China.
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>235-240</td>
<td>TOE NAILS AS A BIOMARKER OF CHRONIC FLUORIDE EXPOSURE SECONDARY TO HIGH WATER FLUORIDE CONTENT IN AREAS WITH ENDEMIC FLUOROSIS</td>
<td>SS Sankhala, Rajkumar Harshwal, Pawan Paliwal, Abhinav Agarwal.</td>
<td>Jaipur, India</td>
</tr>
<tr>
<td>241-248</td>
<td>FLUORIDE CONTAMINATION OF UNDERGROUND WATER IN WEST BENGAL, INDIA</td>
<td>AS Datta, A Chakrabortty, SS De Dalal, SC Lahiri.</td>
<td>Kolkata, India</td>
</tr>
<tr>
<td>249-252</td>
<td>FLUORIDE CONCENTRATIONS IN BOTTLED DRINKING WATER AVAILABLE IN NAJAF AND KARBALA, IRAQ</td>
<td>Reza Fouladi Fard, Amir Hossein Mahvi, Sara Sadat Hosseini, Mohammad Khazaee.</td>
<td>Tehran, Iran</td>
</tr>
<tr>
<td>253-257</td>
<td>FLUORIDE REMOVAL FROM AQUEOUS SOLUTIONS USING SHRIMP SHELL WASTE AS A CHEAP BIOSORBENT</td>
<td>Sina Dobaradaran, Iraj Nabipour, Amir Hossein Mahvi, Mozghan Keshtkar, Farzaneh Elmi, Fatemeh Amanollahzade, Maryam Khorsand.</td>
<td>Bushehr, Iran</td>
</tr>
<tr>
<td>258-265</td>
<td>THE EFFECT OF FLUORIDE-RELEASING RESTORATIVE MATERIALS ON INHIBITION OF SECONDARY CARIES FORMATION</td>
<td>Dimitrios Dionysopoulos.</td>
<td>Thessaloniki, Greece</td>
</tr>
<tr>
<td>266-271</td>
<td>IQ OF 9–12-YEAR-OLD CHILDREN IN HIGH- AND LOW-DRINKING WATER FLUORIDE AREAS IN WEST AZERBAIJAN PROVINCE, IRAN: FURTHER INFORMATION ON THE TWO VILLAGES IN THE STUDY AND THE CONFOUNDING FACTORS CONSIDERED</td>
<td>S Karimzade, M Aghaei, Amir Hossein Mahvi.</td>
<td>Tehran, Iran</td>
</tr>
</tbody>
</table>

**ABSTRACTS**

**NEUROTOXICITY OF FLUORIDE**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>272-273</td>
<td>COMMUNITY WATER FLUORIDATION AND INTELLIGENCE QUOTIENT</td>
<td>Broadbent JM, Moffitt TE, Thomson WM, Ramrakha S, Poulton R.</td>
<td>Dunedin, New Zealand, and Durham, NC, USA</td>
</tr>
<tr>
<td>273</td>
<td>EARLY DIAGNOSIS AND COMPLETE RECOVERY FROM FLUOROSIS</td>
<td>Susheela AK, Mondal NK, Tripathi N, Gupta R.</td>
<td>New Delhi, India</td>
</tr>
<tr>
<td>273-274</td>
<td>EXPOSURE TO FLUORIDE IN SMELTER WORKERS IN A PRIMARY ALUMINUM INDUSTRY IN INDIA</td>
<td>Susheela AK, Mondal NK, Singh A.</td>
<td>New Delhi, India</td>
</tr>
<tr>
<td>274-275</td>
<td>DENTAL FLUOROSIS AND ITS EXTENDED EFFECTS [EDITORIAL COMMENTARY]</td>
<td>Susheela AK.</td>
<td>New Delhi, India</td>
</tr>
<tr>
<td>275</td>
<td>WHY DESERT CAMELS ARE LEAST AFFLICTED WITH OSTEO-DENTAL FLUOROSIS?</td>
<td>Choubisa SL.</td>
<td>Udaipur, India</td>
</tr>
<tr>
<td>275-276</td>
<td>REVERSIBILITY OF DENTAL FLUOROSIS</td>
<td>Choubisa SL, Choubisa L, Choubisa D.</td>
<td>Udaipur, India</td>
</tr>
<tr>
<td>276</td>
<td>TOXIC EFFECTS ON HUMAN BONES</td>
<td>Choubisa SL.</td>
<td>Udaipur, India</td>
</tr>
<tr>
<td>276</td>
<td>OSTEO-DENTAL FLUOROSIS IN RELATION TO CHEMICAL CONSTITUENTS OF DRINKING WATER</td>
<td>Choubisa SL.</td>
<td>Udaipur, India</td>
</tr>
</tbody>
</table>

Copyright © 2014 The International Society for Fluoride Research Inc.


Editorial Office: 727 Brighton Road, Ocean View, Dunedin 9035, New Zealand.

The general information pages, iii-vi, with information about Fluoride and the ISFR follow below.
THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH INC.

The International Society for Fluoride Research was founded in 1966 at a meeting in Detroit of the American Society for Fluoride Research to promote the sharing of scientific information on all aspects of inorganic and organic fluorides. This is done by publication of the peer-reviewed quarterly journal Fluoride and sponsoring international conferences. The first ISFR conference was held in Frankfurt am Main, Germany in 1967 and subsequent conferences have been held in Spain, Austria, the Netherlands, England, the United States of America, Switzerland, India, Japan, Hungary, China, Poland, New Zealand, Canada, and Iran.

The sixth announcement and call for abstracts for the XXXIIIrd ISFR conference, to be hosted by Dr Sunsanee Rajchagool in Chiang Mai, Thailand, on November 25–28, 2014, is published in this issue of Fluoride on pp. 185-7. The XXXIIIrd conference in 2016 is planned for Hyderabad, India, with Dr Arjun Khandare the host.

Fluoride is an open access journal available free on the internet at http://www.fluorideresearch.org, .com, and .net, in full text without an embargo period.

Subscription to Fluoride in hardcopy and attendance at the conferences are welcomed for all interested in fluoride research. Bona fide fluoride researchers are invited to apply for membership of the ISFR.


The Society does not hold an official position on issues such as water fluoridation but encourages, through its conferences, and the publication of papers, commentaries, and letters to the editor, a critical examination of the scientific basis of the views which are held by individuals and organizations.

MEMBERS OF THE ISFR INC. ADVISORY BOARD 2014

President:
Professor Dariusz Chlubek. Pomeranian Medical University, Szczecin, Poland.

First Vice President:
Dr Sunsanee Rajchagool. Director of Intercountry Centre for Oral Health, WHO Collaborating Centre for Promoting Community-based Oral Health, Chiang Mai, Thailand.

Second Vice President:
Dr Arjun Khandare. National Institute of Nutrition, Hyderabad, India.

Co-Secretaries:
Professor Dariusz Chlubek. Pomeranian Medical University, Szczecin, Poland.
Associate Professor Masashi Tsunoda. Kitasato University School of Medicine, Sagamihara, Japan.

Editor-in-Chief and Regional Editors:
as in Table of contents on page i

Members at Large:
Asia
Professor Koichi Kono. Osaka Medical College, Osaka, Japan.
Assistant Professor Amir Hossein Mavhi. Tehran University of Medical Science, Tehran, Iran
Professor Emeritus AK Susheela. Fluorosis Research & Rural Development Foundation, Delhi, India.
Professor Gulfan Sun. China Medical University, Shenyang, China.
Professor Emeritus Humio Tsunoda. Iwate Medical University, Morioka, Japan.

Europe
Professor Miklós Bély. Hungarian Academy of Science, Budapest, Hungary.
Professor Jürgen Franke. Rehaklinik an der Salza, Bad Langensalza, Germany.
Professor Emeritus Zygmunt Machoy. Pomeranian Medical Academy, Szczecin, Poland.
Professor Jörg Spitz. Society for Medical Information and Prevention, Wiesbaden, Germany.

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

Treasurer and Managing Editor of Fluoride:
Dr Bruce Spittle. Dunedin, New Zealand.
MEMBERS OF THE ISFR INC. EDITORIAL BOARD 2013

Editor-in-Chief, Regional Editors, Associate Editors, and Editorial Assistant:
as in Table of contents on page i

Editorial Board Members:
Dr Miklos Bey, Hungarian Academy of Science, Budapest, Hungary.
Dr Russell L Blaylock. Ridgeland, Mississippi, USA.
Associate Professor Andrzej Bohatyrewicz. Dept. of Orthopedics & Traumatology, Pomeranian Medical University, Szczecin, Poland.
Professor Masahiko Chikuma. Osaka University of Pharmaceutical Sciences, Osaka, Japan.
Professor Edward Czerwinski. Jagiellonian University, Krakow, Poland.
Dr Mark Diesendorf. Sustainability Centre, Box 521, Epping, NSW 1710, Australia.
Professor J Franke. Rehaklinik an der Salza, Bad Langensalza, Germany.
Assistant Professor Toshitaka Horuchi. Nihon University School of Dentistry at Matsudo, Japan.
Associate Professor Kazuyoshi Itai. Iwate Medical University, Morioka, Iwate, Japan.
Professor Koichi Kono. Osaka Medical College, Osaka, Japan.
Professor Jerzy Krechniak. Medical University, Gdansk, Poland.
Professor Emeritus C James Lovelace. Humbolt State University, Arcata, CA, USA.
Dr Boguslaw Machalirski. Pomeranian Academy of Medicine, Szczecin, Poland.
Professor Emeritus Zygmunt Machoy. Pomeranian Medical Academy, Szczecin, Poland.
Professor Frank Murray. Murdoch University, Murdoch, WA, Australia.
Professor Masayuki Okazaki. Hiroshima University, Hiroshima, Japan.
Dr James C Pushnik. California State University, Chico, CA, USA.
Professor Masashi Shimahara. Osaka Medical College, Takatsuki City, Osaka, Japan.
Professor Jörg Spitz. Society for Medical Information and Prevention, Wiesbaden, Germany.
Professor Anna Strunecká. Charles University, Prague, Czech Republic.
Professor Guifan Sun. China Medical University, Shenyang, China.
Professor Satoshi Takizawa. Dept. of Urban Engineering, Graduate School of Engineering, University of Tokyo.
Professor Emeritus SPS Teotia. Institute of Higher Medical Sciences, Whitefield, India.
Professor Emeritus Humio Tsunoda. Iwate Medical University, Morioka, Japan.
Professor Jundong Wang. College of Animal Science & Veterinary Medicine, Shanxi Agricultural University, Taigu, Shanxi, PR China.
Professor Emeritus Zan-Dao Wei. Guiyang Medical College, Guizhou, China.
Professor Emeritus Y Yoshida. Osaka Medical College, Osaka, Japan.
Professor Emeritus NBK Yoshitake. Shiga University of Medical Science, Otsu, Japan.
Professor Boasham Zheng. Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, Guizhou, PR China.

Managing Editor:
Dr Bruce Spittle. Dunedin, New Zealand.

FLUORIDE QUARTERLY JOURNAL OF THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH INC.

Fluoride, Quarterly Journal of the International Society for Fluoride Research Inc., is published four times a year (January-March, April-June, July-September, and October-December), in both print (ISSN 0015-4725) and online (ISSN 2253-4083) and contains peer-reviewed scientific reports on agricultural, analytical, biochemical, biological, chemical, clinical, dental, ecological, environmental, industrial, medical, metabolic, pharmacological, synergistic, toxicological, and veterinary aspects of inorganic and organic fluorides. Publication is usually made towards the end of each quarterly period rather than at the start of the period. The journal does not contain advertising.

Copyright. Fluoride is owned and published by the International Society for Fluoride Research. © 2014. All rights reserved.

Online access: Fluoride is an open access journal available without an embargo period and with free full text at: www.fluorideresearch.org, www.fluorideresearch.com, and www.fluorideresearch.net. Further details are given below in the section on past issues. Articles in Fluoride can be searched for using the Google custom search on the website by inserting, in the white box, appropriate key words such as author names, subject key words, and dates, and clicking on the search box. The results can be cleared by clicking on the X to the right of the search box. The search engine covers all articles on the website including the 35-year Cumulative Author and Subject Indexes and subsequent annual indexes. Fluoride is covered by the search engine SciFinder Scholar (from Chemical
Abstracts Service) and Web of Science (from Thomson Corporation for Science Citation Index), but not, at present, through MEDLINE/PubMed.

Citation factors: The SCImago journal and country rankings for Fluoride were: SJR Indicator (2012) 0.23, H index 26, total documents (2012) 32, total documents (3 yr) 117, total references 810, total cites (3 yr) 98, citable documents (3 yr) 107, cites per document (2 yr) 0.76, and references per document 25.31 [SCImago. (2007). SJR — SCImago Journal & Country Rank. Retrieved May 7, 2014 from http://www.scimagojr.com]. The Thomson Reuters Impact Factor for Fluoride for 2010 was 1 (total articles 30, total cites 624), for 2011 it was 0.824 (total articles 32, total cites 710), and for 2012 it was 0.758 (total articles 29, total cites 705) [Retrieved July 30, 2013 from http://www.bioxbio.com/if/html/FLUORIDE.html.]

Subscription to Fluoride in hard copy for 2014, is available for an annual fee, payable annually in advance, of: US$56, Canadian$59, £36, Japan¥5500, €43, Australian$60, or New Zealand$72, with a discount of 10% for copies posted to a New Zealand address, which incurs a lower postal cost. The printing and mailing of Fluoride are paid for in New Zealand dollars and because of some increases in these, the annual fee for 2015 has had to be increased to NZ$78. Using the exchange rates prevailing on July 6, 2014, the fees for 2015 have been set at: US$68, Canadian$73, £40, Japan¥7000, €50, Australian$73, or New Zealand$78, with a discount of NZ$5 for copies posted to a New Zealand address, which incurs a lower postal cost. No subscription agency discount is available. Payment may be made in any of the currencies above. No journals will be mailed until payment is received for the current subscription or membership period. Apply to Dr Spittle, Managing Editor Fluoride, 727 Brighton Road, Dunedin 9035, New Zealand. E-mail: spittle@es.co.nz. Invoices are sent to subscribers with the last issue of each year, apart from those whose copies are ordered through a subscription agency.

Payment options for subscription to Fluoride, and the purchase of back issues are: bank transfer, cheque, cash, or PayPal. Bank transfers can be made to The Bank of New Zealand, New Lynn Branch, 3029 Great North Road, New Lynn, Auckland, New Zealand; Swift BKNZNZ22; Website: www.bnz.co.nz; Fax 64 09 827 6806; Account name: International Society for Fluoride Research; Account number 02 0184 0333239 000. Cheques should be made out to the same or to ISFR. Personal cheques, bank cheques or drafts, and cash may be posted to Dr Bruce Spittle, 727 Brighton Road, Ocean View, Dunedin 9035, New Zealand. Personal or bank cheques, and cash, in US$, Canadian$, £, €, Australian$, and NZ$ are fine provided the cheques have the account information written as a Magnetic Character Recognition Line (MCRL) at the bottom of the cheque. The technology is implemented by printing special block-like characters, 10 digits and four special symbols, in magnetic ink, which may be read automatically by machine and enables speedy checks processing. If there is no MCRL information, the cost of processing the cheque is prohibitive and cheques without MCRL are not acceptable. Cash as Japanese Yen is also fine. Please do not send Canadian or British Postal Notes, cheques drawn on Japanese banks, or cheques in US$ drawn on British banks in the United Kingdom as they cannot be negotiated in New Zealand. PayPal allows payment by Visa or Mastercard directly to an E-mail address in a secure way. It is necessary to first register with PayPal at http://paypal.com. The recipient E-mail address for the payment is spittle@es.co.nz. Just giving the credit card number to the ISFR is not sufficient.

Copies of articles and previous issues of Fluoride: Hard copies of most of the previous issues of Fluoride, including the 35-year cumulative indexes in Fluoride 2002;35(4-Parts 1 and 2), are in stock and may be ordered directly through the Managing Editor for US$12.50 or equivalent per single copy of an issue or part of Fluoride including postage. Individual articles can also be downloaded, free in full text, from the ISFR websites at: www.fluorideresearch.org, www.fluorideresearch.com, and www.fluorideresearch.net. Hard copies of the First and Second International Workshops on Fluorosis Prevention and Defluoridation of Water in Tanzania, 1995, and Ethiopia, 1997, are also available for
US$12 and US$15 respectively including postage. Further details of these publications are in *Fluoride* 2002;35(3):150-2. The proceedings of the first, second, third, and fourth International Workshops on Fluorosis Prevention and Defluoridation of Water are available as free downloads from: http://www.de-fluoride.net/

**Instructions to authors:** Manuscripts, including reports of original research, papers presented at ISFR conferences, research reviews, discussion papers, and letters to the editor, are accepted for publication after appropriate evaluation and recommendation by qualified reviewers. The initial version of the manuscript, double-spaced throughout with wide margins, should be submitted, as a Word attachment by E-mail, to the relevant Regional Editor or, when a Regional Editor has still be to appointed for the countries of residence of the authors, to the Editor-in-Chief. The E-mail addresses for these editors are given in the masthead of the Table of Contents on page i. Detailed instructions for preparing papers are at www.fluorideresearch.org and in *Fluoride* 2013;46(1):40-8. These instructions should be followed meticulously to avoid publication delays.

The Editorial Officers of *Fluoride* strongly support the maintenance of the highest standards of animal care and the control of discomforts to animals in research. Authors must indicate whether their institutional and national guidelines for the care and use of laboratory animals were followed. When reporting experiments on human subjects, authors should indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1964, as revised in 2013, available from http://www.wma.net/en/30publications/10policies/b3/index.html. *Fluoride* follows the recommendations of the International Committee of Medical Journal Editors (ICMJE), and their Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals, updated December 2013, and the ICMJE form for disclosure of potential conflicts of interest are available from: www.icmje.org. The recommendations describe author responsibilities for conflicts of interest, human and animal rights, informed consent, and ethical policies. The ICMJE conflict of interest disclosure form should be downloaded, completed electronically by each author, and then submitted to *Fluoride* with the manuscript. Authors should state if the ICMJE recommendations have been followed.


**Complimentary copies:** Donors wishing to fund gift copies, which will be suitably inscribed, are invited to contact Dr Spittle.

**Membership of the International Society for Fluoride Research Inc.:** Membership in the ISFR Inc. is invited from *bona fide* fluoride researchers. Membership allows participating in the activities of the Society and voting at business meetings. No membership fee is payable. Application for membership may be made by an E-mail letter to Dr Spittle, E-mail: spittle@es.co.nz, including name, postal address, E-mail address, and the area of fluoride research the applicant is involved in.

**Co-secretaries:** Enquiries about ISFR Inc. membership, ISFR Inc. conferences and meetings, and other matters under their jurisdiction may be made to the co-secretaries:

Professor Dariusz Chlubek. Department of Biochemistry and Chemistry, Pomeranian Medical University, al. Powstancow Wlkp. 72, 70-111 Szczecin, Poland. E-mail: dchlubek@sci.pum.edu.pl

Associate Professor Masashi Tsunoda. Department of Preventive Medicine and Public Health, Kitasato University School of Medicine, Kitasato 1-15-1, Sagamihara, Kanagawa, 228-8555, Japan. E-mail: mtsunoda@med.kitasato-u.ac.jp

---

Copyright © 2014 The International Society for Fluoride Research Inc.  
Editorial Office: 727 Brighton Road, Ocean View, Dunedin 9035, New Zealand.