EDITORIAL

75........ IN THIS ISSUE.
Albert W. Burgstahler, Bruce Spittle. Lawrence, KS, USA, and Dunedin, New Zealand

ANNOUNCEMENT

76–77........ THIRD ANNOUNCEMENT: XXXTH CONFERENCE OF THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH, ADVANCES IN FLUORIDE RESEARCH, SEPTEMBER 5–8, 2012. SZCZECIN, POLAND

RESEARCH REPORTS

78–85........ ORGANOFLUORINE METABOLISM IN PLANTS
Mamta Baunthiyal, Abhilasha Pandey. Uttarakhand, India.

86–93........ EFFECT OF FLUORIDE ON OSTEOCLAST FORMATION AT VARIOUS LEVELS OF RECEPTOR ACTIVATOR OF NUCLEAR FACTOR KAPPA-B LIGAND (RANKL)
Junrui Pei, Yanhui Gao, Bingyun Li, Lingwang Zhou, Zhiyi Zhang, Dianjun Sun. Heilongjiang, China.

94–99........ HIGH DIETARY FLUORINE INDUCTION OF OXIDATIVE DAMAGE IN THE CECAL TONSIL OF BROILERS

100–107.... EFFECTS OF HIGH DIETARY FLUORINE ON FATTY ACID COMPOSITION IN BREAST MUSCLE OF BROILERS
Hesong Wang, Hengmin Cui, Xi Peng, Jing Fang, Zhicai Zuo, Juan Liu, Bangyuan Wu, Yuanxin Deng, Kangping Wang. Ya’an, China.

108–115.... EFFECT OF FLUORIDE ON REACTIVE OXYGEN SPECIES AND BONE METABOLISM IN POSTMENOPAUSAL WOMEN
Sreelakshmi Ravula, CV Harinarayan, UV Prasad, T Ramalakshmi, Arunakumari Rupungudi, Vijayabhaskar Madrol. Trupati, Andhra Pradesh, India.

116–124... PROTECTIVE EFFECT OF MELATONIN ON FLUORIDE-INDUCED OXIDATIVE STRESS AND TESTICULAR DYSFUNCTION IN RATS

125–132.... PROTECTIVE EFFECT OF MELATONIN AGAINST FLUORIDE-INDUCED OXIDATIVE STRESS IN THE MOUSE OVARY
Sunita L Chawla, Mandava V Rao. Ahmedabad, India.
LACK OF A SIGNIFICANT RELATIONSHIP BETWEEN TOENAIL FLUORIDE CONCENTRATIONS AND CARIES PREVALENCE

DRINKING WATER IN GONABAD, IRAN: FLUORIDE LEVELS IN BOTTLED, DISTRIBUTION NETWORK, POINT OF USE DESALINATOR, AND DECENTRALIZED MUNICIPAL DESALINATION PLANT WATER
Mahmoud Shams, Sina Dobaradaran, Sajad Mazloomi, Mojtaba Afsharnia, Mehdi Ghasemi, Masoud Bahreinie. Gonabad, Iran.

ABSTRACTS

RELATION BETWEEN BONE FLUORIDE AND OSTEOSARCOMA
142............. AN ASSESSMENT OF BONE FLUORIDE AND OSTEOSARCOMA

EDITORIAL COMMENT
FLUORIDATION AND OSTEOSARCOMA INCIDENCE IN IRELAND
142............. DRINKING WATER FLUORIDATION AND OSTEOSARCOMA INCIDENCE
Comber H, Deady S, Montgomery E, Gavin A. Belfast, Northern Ireland, UK.

BONE CANCER IN GREAT BRITAIN AND FLUORIDE IN DRINKING WATER
143............. PRIMARY BONE CANCER IN 0 – 49 YEAR OLDS IN GREAT BRITAIN, 1980 – 2005 AND FLUORIDE IN DRINKING WATER: A CASE OF INEQUALITIES? [ABSTRACT ONLY]

OSTEOSARCOMA AMONG CHILDREN AND ADOLESCENTS IN THE USA
143–144.... FLUORIDE IN DRINKING WATER AND OSTEOSARCOMA INCIDENCE RATES IN THE CONTINENTAL UNITED STATES AMONG CHILDREN AND ADOLESCENTS
Levy M, Leclerc BS. Québec, Canada.

[18F] UPTAKE FOR PET/CT SCAN ASSOCIATED WITH CORONARY ARTERY DISEASE
144–145.... ASSOCIATION OF VASCULAR FLUORIDE UPTAKE WITH VASCULAR CALCIFICATION AND CORONARY ARTERY DISEASE
Li Y, Berenji GR, Shaba WF, Tafti B, Yevdayev E, Dadparvar S. Los Angeles, CA, USA.

MECHANISMS OF FLUORIDE CYTOTOXICITY
145............. MOLECULAR MECHANISMS OF CYTOTOXICITY AND APOPTOSIS INDUCED BY INORGANIC FLUORIDE
Agalakova NI. Sankt-Petersburg, Russia.

FLUORIDE INTERACTION WITH FUNGICIDES
145–146.... FLUORIDE ENHANCES THE ACTIVITY OF FUNGICIDES THAT DESTABILIZE CELL MEMBRANES
Sanshu L, Breaker RR. New Haven, CT, USA.

LOW FLUORIDE LEVELS AFFECT MACROPHAGE LIPOXGENASE
146............. FLUORIDE IN LOW CONCENTRATION MODIFIES EXPRESSION AND ACTIVITY OF 15 LIPOXGENASE IN HUMAN PBMC DIFFERENTIATED MONOCYTE/MACROPHAGE
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>146–147</td>
<td>INFLUENCE OF INORGANIC FLUORIDE ON LIVING ORGANISMS OF DIFFERENT PHYLOGENETIC LEVEL</td>
<td>Agalakova NI, Gusev GP.</td>
<td>Sankt-Petersburg, Russia.</td>
</tr>
<tr>
<td>147</td>
<td>FLUORIDE-INDUCED DEATH OF RAT ERYTHROCYTES</td>
<td>Agalakova NI, Gusev GP.</td>
<td>Sankt-Petersburg, Russia.</td>
</tr>
<tr>
<td>147–148</td>
<td>A REVIEW OF HYDROFLUORIC ACID AND ITS USE IN THE CAR WASH INDUSTRY [REVIEW]</td>
<td>Genuino HC, Opmbe NN, Njagi EC, McClain S, Suib SL.</td>
<td>Storrs Mansfield, CT, USA.</td>
</tr>
<tr>
<td>149</td>
<td>NEURODEGENERATIVE CHANGES IN DIFFERENT REGIONS OF BRAIN, SPINAL CORD AND SCIATIC NERVE OF RATS TREATED WITH SODIUM FLUORIDE</td>
<td>Reddy PY, Reddy KP, Kumar KP. Hyderabad, Andhra Pradesh, India.</td>
<td></td>
</tr>
</tbody>
</table>
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, 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, and Canada.

The first announcement for the XXXth ISFR conference, to be hosted by Professor Dariusz Chlubek in Szczecin, Poland, on September 5–8, 2012, was published in Fluoride 2011;44(4):183-7. Further information is available on the conference website: http://science24.com/event/isfr2012/, in the second announcement in Fluoride 2012;45(1):5-6, and in the third announcement on pages 76–77 of this issue of Fluoride. Approximately 120 attendees are expected. The XXXIst conference is planned for Chiang Mai, Thailand in 2014 with Dr Sunsanee Rajchagool the host, and the XXXIIInd 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 in 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 2012

President:
Associate Professor Jashwanti D Sharma. Dept. of Zoology, University of Rajasthan, Jaipur, India

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

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

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

Editor of Fluoride:
Professor Emeritus Albert W Burgstahler. University of Kansas, Lawrence, KS, USA.

Members at Large:

Asia
Professor Koichi Kono. Osaka Medical College, Osaka, Japan.
Professor Emeritus AK Susheela. Fluorosis Research & Rural Development Foundation, Delhi, India.
Professor Guifan Sun. China Medical University, Shenyang, China.
Professor Emeritus Humio Tsunoda. Iwate Medical University, Morioka, Japan.
MEMBERS OF THE ISFR INC. EDITORIAL BOARD 2012

Editor of Fluoride:
Professor Emeritus Albert W Burgstahler. University of Kansas, Lawrence, KS, USA

Associate Editors:
Professor Dariusz Chlubek. Dept of Biochemistry & Chemistry, Pomeranian Medical University, Szczecin, Poland.
Professor Hardy Limeback. University of Toronto, Toronto, ON, Canada.
Professor Emeritus Gene W Miller. Utah State University, Logan, UT, USA.
Christopher Neurath. University of California, Berkeley, CA, USA.
Associate Professor Jashwanti D Sharma. Dept. of Zoology, University of Rajasthan, Jaipur, India.
Professor Dianjun Sun. Chinese Research Center for Endemic Disease Control, Harbin Medical University, Harbin, PR 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 Board Members:
Dr Miklos Bély. 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 Emeritus Zygmunt Machoy. Pomeranian Medical Academy, Szczecin, Poland.
Professor Emeritus Albert W Burgstahler. University of Kansas, Lawrence, KS, USA.
Professor Emeritus Humio Tsunoda. Iwate Medical University, Morioka, Iwate, Japan.
Professor Masashi Shimahara. Osaka Medical College, Takatsuki City, Osaka, Japan.
Professor Emeritus Y Yoshitake. Shiga University of Medical Science, Otsu, Japan.
Professor Emeritus SPS Teotia. Institute of Higher Medical Sciences, Whitefield, India.
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, Taiyuan, Shanxi, PR China.
Professor Emeritus Zan-Dao Wei. Guiyang Medical College, Guizhou, China.
Professor Emeritus Y Yoshitake. Shiga University of Medical Science, Otsu, Japan.
Professor Emeritus Bohasham Zheng., Institute of Geochemistry, Chinese Academy of Sciences, Guizhou, PR China.

Editorial Assistants:
Peter Meiers. Saarbrücken, Germany.

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. © 2012. 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 × 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 also covered by the Chemical Abstracts 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 2011 SFR Indicator for Fluoride was 0.04, the cites per document (2 yr) 0.46, and the total cites 64 [SCImago. (2007). SJR — SCImago Journal & Country Rank. Retrieved July 11, 2012, from http://www.scimagojr.com]. A Thomson Reuters Impact Factor has been calculated for 2011.

Subscription to Fluoride in hard copy for 2012, is available for an annual fee, payable annually in advance, of: US$51, Canadian$53, £33, Japan¥4500, €39, Australian$57, or New Zealand$72, with a discount of 10% for copies posted to a New Zealand address, which incurs a lower postal cost. The annual fee for the print version for 2013 is US$55, Canadian$53, £35, Japan¥4500, €45, Australian$57, or New Zealand$72, with a discount of 10% for copies posted to a New Zealand address. 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 033239 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. 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 all of the previous issues of Fluoride, including the 35-year cumulative indexes in Fluoride 2002;35(4-Parts 1 and 2), are usually kept in stock and may be ordered directly through the Managing Editor for US$10 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. 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.

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:

Professor Emeritus AW Burgstahler
Editor, Fluoride
1620 Massachusetts Street
Lawrence, KS 66044-4254, USA.
E-mail: awburg@ku.edu).

Do not send manuscripts to the Managing Editor. If submission is by post, please send two copies, without a computer disc. Detailed instructions for preparing papers are at www.fluorideresearch.org and in Fluoride 2012;45(1):67–74. 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 1975, as revised in 2000 (World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. JAMA 2000 Dec 20;284(23):3043-5).

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 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 © 2012 The International Society for Fluoride Research Inc.
Editorial Office: 727 Brighton Road, Ocean View, Dunedin 9035, New Zealand.