EDITORIAL

89–92....... FLUORIDE NEUROTOXICITY AND EXCITOTOXICITY/MICROGLIAL ACTIVATION: CRITICAL NEED FOR MORE RESEARCH
Russell L Blaylock. Ridgeland, MS, USA.

ANNOUNCEMENT

93............ THIRD ANNOUNCEMENT: XXVIITH CONFERENCE OF THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH; OCTOBER 9–12, 2007; BEIJING, CHINA.

IN MEMORIAM: TRIBUTE TO MARTHA BEVIS

94–95..... MARTHA BEVIS: A LEADER AHEAD OF HER TIME, 1927–2007
Albert W Burgstahler. Lawrence, KS, USA.

RESEARCH REPORTS

96–100...... VULVAR PAGET’S DISEASE: RECOVERY WITHOUT SURGERY FOLLOWING CHANGE TO VERY LOW-FLUORIDE SPRING AND WELL WATER
Michael P Connett. Burlington, Vermont, USA.

101–110.... DOSE-DEPENDENT EFFECTS OF FLUORIDE ON NEUROCHEMICAL MILIEU IN THE HIPPOCAMPUS AND NEOCORTEX OF RAT BRAIN
Krishnaiah Chirumari, Pratap Karnati Reddy. Hyderabad, India.

111–115.... PERFORMANCE DIFFERENCES OF TWO POTENTIOMETRIC FLUORIDE DETERMINATION METHODS IN HARD DENTAL TISSUE
Guglielmo Campus, Leonardo Gaspa, Maria Pilo, Roberta Scanu, Nadia Spano, Maria Grazia Cagetti, Gavino Sanna. Sassari and Milano, Italy.

116–127.... INFLUENCE OF FLUORIDE ON RABBIT ORGAN MORPHOLOGY IN ATHEROMATOSIS
Barbara Stawiarska-Pięta, Ewa Birkner, Rafal Stojko, Ewa Grucka-Mamczar, Ewa Szafalarska-Stojko, Anna Maj, Beata Birkner, Magdalena Wyszyńska. Sosnowiec and Zabrze, Poland.

128–133.... PERIODONTAL CHANGES IN FLUOROSED AND NONFLUOROSED TEETH BY SCANNING ELECTRON MICROSCOPY
Vandana KL, Pauline George, Charles M Cobb. Karnataka, India.
EFFECTS OF DENTAL FLUOROSIS ON MICROLEAKAGE FROM CLASS-V ORMOCER RESTORATIONS IN PERMANENT MOLAR TEETH

EFFECT OF SUPPLEMENTED PROTEIN AND Ca NUTRITION ON FLUORIDE-INDUCED DISTURBANCE OF RIB COL1A1 GENE EXPRESSION IN RABBITS
Xiaoyan Yan, Wentao Li, Binhua Zhou, Jinming Wang, Jundong Wang. Shanxi, China.

ABSTRACTS

BIOCHEMICAL EFFECTS

149................. CURRENT TRENDS IN FLUORINE RESEARCH
Machoy-Mokrzynska A, Machoy Z. Szczecin, Poland.

DENTAL EFFECTS

149–150....... ASSESSMENT OF PERIODONTAL STATUS IN DENTAL FLUOROSIS SUBJECTS USING COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS
Vandana KL, Reddy SM. Davangere, Karnataka, India.

150................. COMMUNITY WATER FLUORIDATION AND CARIES PREVENTION: A CRITICAL REVIEW
Pizzo G, Piscopo MR, Pizzo I, Giuliana G. Palermo, Italy.

HEALTH / TOXIC EFFECTS IN ANIMALS

150................. EDITOR’S NOTE

150–151....... PROTECTIVE EFFECTS OF VITAMINS C AND E AGAINST ENDOMETRIAL DAMAGE AND OXIDATIVE STRESS IN FLUORIDE INTOXICATION.

151................. EFFECT OF FLUORIDE INTOXICATION ON ENDOMETRIAL APOPTOSIS AND LIPID PEROXIDATION IN RATS: ROLE OF VITAMINS E AND C

151–152...... FLUOROSIS AND ITS HEMATOLOGICAL EFFECTS
Erdal E, Mustafa O, Ethem FM, Duran C. Isparta, Turkey.

152................. SUPPRESSION OF MALE REPRODUCTION IN RATS AFTER EXPOSURE TO SODIUM FLUORIDE DURING EARLY STAGES OF DEVELOPMENT

HEALTH / BIOLOGICAL EFFECTS IN HUMANS

152................. FLUORIDE IN DRINKING WATER: A REVIEW ON THE STATUS AND STRESS EFFECTS
Ayoob S, Gupta AK. Karagpur, India.

153................. ADDITION OF MONOFLUOROPHOSPHATE TO ESTROGEN THERAPY IN POSTMENOPAUSAL OSTEOPOROSIS - A RANDOMIZED CONTROLLED TRIAL

153................. APOPTOTIC STUDY ON THE EFFECT OF FLUORINE AND SELENIUM ON THE HUMAN HAIR FOLLICLE IN VITRO
Tu JB, Yang ZQ, Xing Z, Xue Y, Liu XH. Xi'an, China.
153–154...... IMPACT OF ANTIOXIDATIVE THERAPY ON THE ACTIVITY OF SALIVARY GLUTATHIONE-DEPENDENT ENZYMES IN PATIENTS WITH FLUOROSIS

154.............. DOSE-EFFECT RELATIONSHIP BETWEEN DRINKING WATER FLUORIDE LEVELS AND DAMAGE TO LIVER AND KIDNEY FUNCTIONS IN CHILDREN
Wuhan, Hubei, People’s Republic of China.

Figure. The Great Wall of China at Ju Yong Pass, north of Beijing.

Ju Yong Pass is situated 50 km northwest of Beijing in a valley 15 km in length. The Great Wall was first built in the Qin Dynasty, 222–206 BC. Ju Yong Pass is at a strategic point along the wall and is noted for its beautiful scenery. In the Jin Dynasty, 1115–1234 AD, it was listed one of the eight best scenic attractions in Beijing. The gate in the center of the pass is built of finely carved marble and called Cloud Terrace or Guojie (crossing-street) in Chinese. This building was originally the base of three towers and was built in 1345. It is nearly 10 m high, with a base measuring 27 × 15 m. Originally, three towers stood on the top of Cloud Terrace but they were destroyed by an earthquake in the early Ming Dynasty leaving only the terrace. The arch gateway underneath the terrace, 7 m high and 6 m wide, allowed the passage of horse drawn carriages. The sides of the arched gateway are decorated with carvings of Buddhas, four Celestial Kings, and the text of a Buddhist Sutra in Chinese, Tibetan, Sanskrit, and three other minority languages. In 1644, the troops of the peasant uprising led by the peasant general Li Zicheng entered the city from here to take it over. Later that year Li Zicheng overthrew the Ming Dynasty. At that time the area of the pass had a large population but later, as transport improved, fewer people stayed there overnight, and the area gradually became relatively deserted.
THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH

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 the publication of a quarterly journal *Fluoride* and the hosting of international conferences. The first ISFR conference was held in Frankfurt, Germany in 1967. Conferences have also been held in Spain, Austria, the Netherlands, England, the United States of America, Switzerland, India, Japan, Hungary, China, Poland, and New Zealand. The next conference, the XXVIIth, will be hosted by Professor Guifan Sun, with the assistance of Dr Dianjun Sun, in Beijing, People’s Republic of China, October 9–12, 2007 (See announcements, Fluoride 2006;39(4):247-51, 2007;40(1):1-3, and in this issue, p. 93). The XXVIIIth conference will be hosted by Dr JD Sharma in Jaipur, India in 2009. Subscription to *Fluoride*, membership in the ISFR (for fluoride researchers), and attendance at the conferences are welcomed.

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 ADVISORY BOARD 2006**

**President:**
Professor Jörg Spitz. Society for Medical Information and Prevention, Wiesbaden, Germany.

**Vice President:**
Professor Guifan Sun. China Medical University, Shenyang, People’s Republic of China.

**Co-Secretaries:**
Professor Dariusz Chlubek. Pomeranian Medical University, Szczecin, Poland.
Assoc. Prof. 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 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.

- **North America**
  Dr Richard G Foulkes. Abbotsford, BC, Canada.
  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 EDITORIAL BOARD 2006**

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

**Associate Editors:**
Dr Richard G Foulkes. Abbotsford, BC, Canada.
Professor Emeritus Lennart P Krook. Cornell University, Ithaca, NY, USA.
Professor Hardy Limeback. University of Toronto, Toronto, ON, Canada.
Professor Emeritus Gene W Miller. Utah State University, Logan, UT, USA.
Professor Emeritus Ming-Ho Yu. Western Washington University, Bellingham, WA, USA.

**Editorial Board Members:**
Dr Miklós Bély. Hungarian Academy of Science, Budapest, Hungary.
Professor Masahiko Chikuma. Osaka University of Pharmaceutical Sciences, Osaka, Japan.
Professor Edward Czerwinski. Jagiellonian University, Kraków, 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 Horiuchi. Nihon University School of Dentistry at Matsudo, Japan.
Associate Professor Kazuyoshi Itai. Iwate Medical University, Morioka, Iwate, Japan.
Professor K 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 Machaliński. Pomeranian Academy of Medicine, Szczecin, Poland.
Professor Emeritus Zygmunt Machoy. Pomeranian Medical Academy, Szczecin, Poland.
Professor F Murray. Murdoch University, Murdoch, WA, Australia.
Professor Masayuki Okazaki. Hiroshima University, Hiroshima, Japan.
Dr James C Pushnik. California State University, Chico, CA, USA.
Dr BP Rajan. Ragas Dental Clinic, Mylapore, Chennai, India.
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.
Dr Dianjun Sun, Harbin Medical University, Harbin, P.R. China.
Professor Guifan Sun. China Medical University, Shenyang, China.
Professor Emeritus AK Susheela. Fluorosis Res & Rural Develop Foundation, New Delhi, India.
Professor Emeritus SPS Teotia. Institute of Higher Medical Sciences, Whitefield, India.
Professor Emeritus Humio Tsunoda. Iwate Medical University, Morioka, Japan.
Assoc. Professor Masashi Tsunoda. Kitasato University School of Medicine, Sagamihara, Japan.
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.

Editorial Assistant:

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

FLUORIDE QUARTERLY JOURNAL OF THE INTERNATIONAL SOCIETY FOR FLUORIDE RESEARCH
ISSN 0015-4725, is published four times a year (January—March, April—June, July—September, and October—December), and contains 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 © 2007. All rights reserved.

ONLINE ACCESS Fluoride is available with free full text access 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 35-year Cumulative Author and Subject Indexes on the website and 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 Index Medicus/PubMed. Some articles may also be found with the Google search engine and with Google Scholar and Google Advanced Scholar at: http://scholar.google.com.

SUBSCRIPTION & MEMBERSHIP. Subscription to Fluoride is available to all. Membership in the ISFR is invited from fluoride researchers and others interested in fluoride research. The membership fee is the same as the subscription fee and includes receiving Fluoride. Family and student membership are described below. Application for subscription or membership may be made by letter including name, postal address, and E-mail address, and should be sent, with the appropriate fee when applicable (no fee is payable for student membership), to the Treasurer Dr Bruce Spittle (E-mail: spittle@es.co.nz); 727 Brighton Road, Dunedin 9035, New Zealand. Please indicate if you would like the membership or subscription to start with the calendar year or with a particular issue of the journal.

SUBSCRIPTION AND MEMBERSHIP FEE for the years 2007 and 2008, payable annually in advance, is: US$51, Canadian$63, €28, Japan¥5500, £42, Australian$66, New Zealand$72, with a discount of 10% for copies posted to a New Zealand address, which incurs a lower postal cost. No subscription agency discount is available in order to keep the fees as low as possible for all members and subscribers. Subscribers and members may pay in whatever currency is most convenient for them. The rates for 2006, 2007, and 2008 have been kept at the same level as was set on 23 June 2005. No journals will be mailed until payment is received for the current subscription or membership period. Apply to Dr Spittle, E-mail: spittle@es.co.nz. FAMILY MEMBERSHIP: Members of the same family may apply for family membership. The fee for the whole family is the same as that for a member. One copy of the journal will be posted to the family.

STUDENT MEMBERSHIP: Students may apply for membership. No membership fee is payable. Access to the journal will be via the website and no hardcopy of the journal will be posted. Membership allows participating in the activities of the Society and voting at business meetings.

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. By clicking on the blue highlighted page numbers on the relevant Table of Contents for Fluoride 1968;2(3), 1969;2(4), and 1999;32(1) to the current issue. All the other issues from Fluoride 1968;1(1) have also been posted at the websites but are in the form of “disassembled issues.” For these the issues were taken apart and adjacent pages were scanned so they consist of large files with the pages not in numerical order, but in the order used for printing, e.g. p. 1 next to p. 72, p. 2 next to p. 71, p. 3 next to p. 70. Because the files are large they are slow to download but if downloaded and printed out (doublesided) the original issue can be reassembled. Alternatively a hardcopy of the issue is available from the Managing Editor as above. Copies of articles are also available, at rates set by the supplier, from: University Microfilms International, Box 91, Ann Arbor, MI 48106, USA; Institute for Scientific Information, 3501 Market St., Philadelphia, PA 19104, USA; BIOSIS, c/- Advanced Information Consultants, Box 87127, Canton, MI 48187, USA; The UnCover Company, 3801 E. Florida, Suite 200, Denver, CO 80210, USA.

POSTAL METHODS USED: Fluoride is posted by Economy International Airmail to all countries (11-25 days for delivery) except Australia (International Air, 3-6 days) and New Zealand (Post, 2-3 days). In practice, deliveries to India, often appear to take longer than the times advertised by New Zealand Post.

ENQUIRIES ABOUT NON-DELIVERY: To help minimize the time spent on administration, which is being given on a voluntary basis, enquiries about non-delivery should not be made until two months have passed since the end of the publication period to allow time for publication or delivery delays. The issues are normally published during the period covered by the issue, usually near the end of the period, and making enquiries about non-delivery before the times shown below is not helpful. Unless otherwise stated, the times shown below is not helpful. Unless otherwise stated, the times shown below refer to post issues which are not available for urgent requests and may not be obtained on the same day as the request is received. The following table indicates the time after the issue is published that you should wait before enquiring about non-delivery.

<table>
<thead>
<tr>
<th>Issue No.</th>
<th>Period covered by issue</th>
<th>Month to wait for before enquiring about non-delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January-March</td>
<td>June</td>
</tr>
<tr>
<td>2</td>
<td>April-June</td>
<td>September</td>
</tr>
<tr>
<td>3</td>
<td>July-September</td>
<td>December</td>
</tr>
<tr>
<td>4</td>
<td>October-December</td>
<td>March</td>
</tr>
</tbody>
</table>

PAYMENT OPTIONS: For the subscription to Fluoride, membership of the ISFR which includes receiving 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. 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 insufficient.

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 Prof 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 this issue, p. 75–84.

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 animal 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.

CO-SECRETARIES: Enquiries about ISFR membership, ISFR 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@pam.szczecin.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: mtsonoda@med.kitasato-u.ac.jp

Copyright © 2007 International Society for Fluoride Research.


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