

PTERIDINES

OFFICIAL JOURNAL OF THE INTERNATIONAL SOCIETY
OF PTERIDINOLOGY

EDITOR-IN-CHIEF

Dietmar Fuchs, Innsbruck

EDITORIAL BOARD

Terken Baydar, Ankara

Nenad Blau, Heidelberg

Keith Channon, Oxford

Basak Engin, Ankara

Viola Groehn, Schaffhausen

Steven S. Gross, New York, NY

Hiroshi Ichinose, Yokohama

Greg Kapatoss, Detroit, MI

Katharina Kurz, Innsbruck

Aurora Martinez, Bergen

Bohuslav Melichar, Olomouc

Vojtech Parrak, Bratislava

Godefridus J. Peters, Amsterdam

Wolfgang Pfeleiderer, Konstanz

Gilbert Reibnegger, Graz

Haruro Shintaku, Osaka

Knut Teigen, Bergen

Anders H. Thomas, La Plata

Guenter Weiss, Innsbruck

Ernst R. Werner, Innsbruck

Jeongbin Yim, Seoul



DE GRUYTER

ABSTRACTED/INDEXED IN Celdes; Chemical Abstracts Service (CAS); Chemical Abstracts Service (CAS) – SciFinder; CNKI Scholar (China National Knowledge Infrastructure); CNPIEC; Elsevier – SCOPUS; Google Scholar; J-Gate; Primo Central (ExLibris); SCImago (SJR); TDOne (TDNet); Thomson Reuters: Journal Citation Reports/Science Edition, Science Citation Index Expanded; Ulrich's Periodicals Directory/ulrichsweb

The publisher, together with the authors and editors, has taken great pains to ensure that all information presented in this work (programs, applications, amounts, dosages, etc.) reflects the standard of knowledge at the time of publication. Despite careful manuscript preparation and proof correction, errors can nevertheless occur. Authors, editors and publisher disclaim all responsibility for any errors or omissions or liability for the results obtained from use of the information, or parts thereof, contained in this work.

The citation of registered names, trade names, trademarks, etc. in this work does not imply, even in the absence of a specific statement, that such names are exempt from laws and regulations protecting trademarks etc. and therefore free for general use.

ISSN 0933-4807 · e-ISSN 2195-4720

All information regarding notes for contributors, subscriptions, Open access, back volumes and orders is available online at www.degruyter.com/pteridines.

RESPONSIBLE EDITOR Prof. Dr. Dietmar Fuchs, Division of Biological Chemistry, Biocentre, Innsbruck Medical University, Innrain 80, 6020 Innsbruck, Austria, Tel.: +43 (0)512-9003 70350, Fax: +43 (0)512-9003 73110, Email: Dietmar.Fuchs@i-med.ac.at

JOURNAL MANAGER Dr. Gunda Stöber, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany, Tel.: +49 (0)30 260 05–279, Fax: +49 (0)30 260 05–298, Email: pteridines.editorial@degruyter.com

RESPONSIBLE FOR ADVERTISEMENTS Panagiota Herbrand, De Gruyter, Rosenheimer Straße 143, 81671 München, Germany, Tel.: +49 (0)89 769 02 – 394, Fax: +49 (0)89 769 02 – 350, Email: panagiota.herbrand@degruyter.com

© 2014 Walter de Gruyter GmbH, Berlin/Boston

TYPESETTING Compuscript Ltd., Shannon, Ireland

PRINTING Franz X. Stücker Druck und Verlag e.K., Ettenheim
Printed in Germany



Offenlegung der Inhaber und Beteiligungsverhältnisse gem. § 7a Abs. 1 Ziff. 1, Abs. 2 Ziff. 3 des Berliner Pressegesetzes: Die Gesellschafter der Walter de Gruyter GmbH sind: Cram, Gisela, Rentnerin, Berlin; Cram, Elsbeth, Pensionärin, Rosengarten-Alvesen; Cram, Margret, Studienrätin i.R., Berlin; Cram, Dr. Georg-Martin, Unternehmens-Systemberater, Stadtbergen; Cram, Maike, Berlin; Cram, Jens, Mannheim; Cram, Ingrid, Betriebsleiterin, Tuxpan / Michoacan (Mexiko); Cram, Sabina, Mexico, DF (Mexiko); Cram, Silke, Wissenschaftlerin, Mexico DF (Mexiko); Cram, Björn, Aachen; Cram, Ella Anita, Rentnerin, Berlin; Cram, Berit, Greifswald; Cram-Gomez, Susanne, Mexico DF (Mexiko); Cram-Heydrich, Walter, Mexico DF (Mexiko); Duvenbeck, Brigitta, Oberstudienrätin i.R., Bad Homburg; Fund, Dr. Sven, geschäftsführender Gesellschafter, Berlin; Gädeke, Gudula, M.A., Atemtherapeutin/Lehrerin, Tübingen; Gädeke, Martin, Einzelunternehmer, Würzburg; Lubasch, Dr. Annette, Ärztin, Berlin; Schütz, Dr. Christa, Ärztin, Mannheim; Schütz, Sonja, Berlin; Schütz, Juliane, Berlin; Schütz, Antje, Berlin; Schütz, Valentin, Berlin; Seils, Dorothee, Apothekerin, Stuttgart; Seils, Gabriele, Journalistin, Berlin; Seils, Dr. Clara-Eugenie, Oberstudienrätin i.R., Reppenstedt; Seils, Christoph, Journalist, Berlin; Siebert, John-Walter, Pfarrer, Oberstenfeld; Walter de Gruyter Stiftung, Berlin.

Contents

Original articles

Sachin Vipin Trivedi, Bohuslav Melichar, Martin Majirský, Pavel Veselý, Hana Kalábová, Hana Študentová, Lenka Kujovská Krčmová, Dagmar Solichová and Martin Doležel
Urinary neopterin concentrations during radiotherapy for gynecological cancer — 1

Saburo Uchiyama and Ikuo Hatakeyama
Protection of spores from ultraviolet-C irradiation by auto-fluorescent substances in the spore mass of the cellular slime mold *Dictyostelium discoideum* — 7

Abstracts

33rd International Winter Workshop Clinical, Chemical and Biochemical Aspects of Pteridines and Related Topics
Held in Innsbruck, Tyrol Austria, February 25–28th 2014 — 11