



# GACETA

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## Actividades de la Academia

### Eventos auspiciados por la Academia

**IX Congreso Colombiano de Geología. VI Conferencia Colombiana de Geología Ambiental. III Encuentro Colombiano de Corporaciones Autónomas Regionales.** Medellín, julio 30, 31 y agosto 1 de 2003. Organización de la *Sociedad Colombiana de Geología, Ingeominas, Universidad Nacional de Colombia, sede Medellín, Academia Colombiana de Ciencias Exactas, Físicas y Naturales, Universidad Eafit, Integral S.A.* **Temas:** •Geología regional (tectónica, geocronología) •Estratigrafía (sedimentología, paleontología)•Petrología (mineralogía, geoquímica, vulcanología) •Geofísica (sismología) •Geología marina y de costas •Geomorfología y Geología del Cuaternario •Geología económica (metálicos, no metálicos, hidrocarburos) •Hidrogeología •Geología ambiental (geotecnia, planificación, amenazas naturales). *Conferencistas internacionales:* -UMBERTO CORDANI, Universidad de Sao Paulo, Brasil (Geocronología Suramericana) -ANTONIO CENDRERO, Universidad de Cantabria, España Planificación física territorial) -CARLOS JARAMILLO, Uni-

versidad de Miami, EEUU (Paleobotánica) -GEORGE GORIN, Universidad de Ginebra, Suiza (Sedimentología - Estratigrafía) -ROY SHLEMON, Consultor, Palo Alto, California, EEUU (Neotectónica, Paleosuelos) -WILLIAM MACDONALD, SUNY, Binghamton, EEUU (Paleomagnetismo, Geología regional) -ROBERT SHAW, Consultor, Canadá (Geología económica) -ANDREW KERR, Universidad de Cardiff, Gran Bretaña (Geoquímica). *Comité Organizador:* MICHEL HERMELÍN, Universidad Eafit, Presidente Congreso. ISABEL MEJÍA, Ingeominas, Secretaria Ejecutiva Congreso. RICARDO VIANA, Ingeominas, Director Capítulo Antioquia de la Sociedad Colombiana de Geología. CLAUDIA PATRICIA LALINDE, Universidad Eafit. Gloria Toro, Universidad Eafit. HUMBERTO CABALLERO, Universidad Nacional, sede Medellín. MARÍA ISABEL MESA, Integral S.A. MARION WEBER, Universidad Nacional, sede de Medellín. PABLO LIEMANN, Consultor. *Mayores informes:* Comunicaciones efectivas, S. A Firma Operadora RNT OPC 4385, Cl. 35 No. 73A 92. Tel. 574 - 2506091 Fax. 574 - 4110010 Medellín - Colombia *operativo@comunicacioneseffectivas.com* *www.comunicacioneseffectivas.com*

## Eventos de interés

**History of Science and Scientific Popularisation: Scientific Journalism. 2nd Spring School of History of Science,** Mao, Menorca, España, 3-5 de abril 2003. Scientific Journalism constitutes an interdisciplinary subject cultivated by several scholars such as historians, secondary school teachers, journalists, scientists, engineers, museum curators, archivists or librarians. Our school will be devoted on this occasion to students and specialists from all this areas. Discussion will be centred in this meeting in written press. Other means of divulging will be studied in next meetings. This school seeks to study in depth questions such as:

- journalism as a means of communication and arrangement of the scientific network.
- the role of journalism as a way of divulging scientific knowledge.
- the audiences of scientific journalism: from the expert to the lay.
- training of divulgators: from the populariser scientist to the specialized journalist.
- creation of a public image of science through newspaper press in the 19th and early 20th centuries.

Moreover, this school will also pay attention to a relevant question that is how to keep and preserve news-

paper press as a part of our scientific heritage. So, it is intended to create public awareness regarding the difficulties of safeguarding such a king of heritage considered as a means of paramount importance for the research of historians of science. There is still a lot of work to be done in this area. Achievement of basic tasks, such as finding and cataloguing collections, construction of repositories, preservation of materials in libraries or archives or free access of these resources through the Internet, are just preliminary aims to be carried out. Mayores informes: *Societat Catalana d'Historia de la Ciència i de la Tècnica*. Institut d'Estudis Catalans, C/ del Carme, 47. 08001 BARCELONA, Tel. 933-248-581, email: mcamps@iecat.net

**The Mathematics Education into the 21st Century Project. The Decidable and the Undecidable in Mathematics Education.** Brno, República Checa, del 19 al 25 de septiembre de 2003. El Comité local está presidido por el Profesor IVAN MEZNIK, de la Universidad Técnica de Brno. El tema de la conferencia es un tributo a KURT GÖDEL, quien nació y se educó en Brno. Entre los conferenciantes invitados están NICOLINA MALARA y FILIPPO SPAGNOLO. Se esperan trabajos innovativos en todos los aspectos de la educación matemática, incluyendo la enseñanza de la estadística, género e igualdad, etnomatemáticas, tareas de aprendizaje, resolución de problemas, investigación en aprendizaje y enseñanza, las nuevas tecnologías en el aula, computación gráfica y educación de profesores. Para mayores detalles comunicarse con

[arogerson@vsg.edu.au](mailto:arogerson@vsg.edu.au)

## Medallas Fields 2002

Las medallas Fields para 2002 fue-

ron otorgadas en el Congreso Internacional de Matemáticas en Beijing, en agosto de 2002. Los galardonados fueron:

\* LAURENT LAFFORGUE, del Institut des Hautes Études Scientifiques, Bures-sur-Yvette, Francia, por realizar un gran avance en el Programa Langlands, estableciendo así nuevas conexiones entre la teoría de los números y el análisis.

\* VLADIMIR VOEVODSKY, del Institute for Advanced Study, Princeton, New Jersey, por el desarrollo de nuevas teorías cohomológicas para las variedades algebraicas, suministrando nuevas luces entre la teoría de los números y la geometría algebraica.

## El Premio Nevalinna 2002

\* MADHU SUDAN, del Massachusetts Institute of Technology, Cambridge, Massachusetts, por sus contribuciones a las demostraciones probabilísticamente verificables, a la no aproximabilidad de los problemas de optimización y los códigos autocorrectores.

## Elegidos nuevos miembros en otras Academias

La venerable *Royal Society de Londres*, fundada en 1660, ha elegido a los siguientes cinco matemáticos como miembros: TERENCE JOHN LYONS (University of Oxford), ERIC RONALD PRIEST (University of St Andrews), SUSAN MARY REES (University of Liverpool), MILES ANTHONY REID (University of Warwick), and PETER SARNAK (Courant Institute). Recordemos que la *Royal Society* tiene un triple papel: es la Academia de Ciencias del Reino Unido, es una sociedad científica y finalmente es una agencia de financiación.

La *National Academy of Sciences* ha elegido a los siguientes matemáticos como miembros: DAVID W. McLAUGHLIN (Courant Institute of Mathematical Sciences, New York University); DAVID P. RUELLE (Institut des Hautes Etudes Scientifiques, France); PETER SARNAK (New York University); PETER W. SHOR (AT&T Laboratories, Florham Park, NJ); DAVID O. SIEGMUND (professor of statistics, Stanford University); and YUM-TONG SIU (Harvard University).

## Revista de historia de la biología

**Antilia: Revista Española de historia de las ciencias de la naturaleza y de la tecnología / Spanish Journal of History of Natural Sciences and Technology**, (ISSN: 1136-2049) es una revista bilingüe (español inglés) que pretende difundir entre la comunidad internacional investigaciones históricas científicas preferentemente dedicadas a España y Latinoamérica. Incluye, además, una sección de Reseñas Bibliográficas y otra de Notas, con comentarios sobre investigaciones en curso, noticias, información de Congresos,... etc. Sus editores son: JOAQUÍN FERNÁNDEZ PÉREZ y LUIS ALFREDO BARATAS DÍAZ. Historia de la Biología. Facultad de Biología. Universidad Complutense de Madrid. Información adicional se puede solicitar en:

[Antilia@eucmax.sim.ucm.es](mailto:Antilia@eucmax.sim.ucm.es)

## Historia de la geofísica

A commission for the history of geophysics, cosmical physics and space physics has been founded under the leadership of the internationally well-known physicist Professor Dr. HANS-JÜRGEN TREDER, formerly director of the Einstein-Laboratory for theoretical physics of the

German Academy of Sciences.

The commission published a journal entitled "Contributions for the history of geophysics and cosmical physics," which is open to all authors. It is a discussion forum for the interdisciplinary discussion of problems in history and philosophy of geosciences and its sub-disciplines, including solar-terrestrial physics and its special problems in development and history, and space physics. This includes also space science education, the public understanding of space science and the history of space science and aeronautics in general. The discussion will cover from the first step since FABRICIUS, SCHEINER and GALILEI up to now of the recent space experiments.

A recent volume has been published under the title "Pathways to Science" and includes authors such as Sir IAN AXFORD, SYUIN-I. AKASOFU, Sir ALLAN COOK, DAVID OLDROYD, GIOVANNI GREGORI, HELMUT MORITZ, formerly president of IUGG, and many others. The authors described their way to science, especially to geophysics. A further study dealt with the aurora of march 17, 1716 and includes the original text by CH. WOLFF, G. LANGHAUSEN, and C. KIRCH.

Another purpose of the commission is to collect old instruments, biographical notes, scientific correspondence (e.g. selected letters of the Seismologist EMIL WIECHERT with HENDRIK A. LORENTZ (Nobel Laureate) and ARNOLD SOMMERFELD (theoretical physicist) has been published by WILFRIED SCHRÖDER (Archive Hist. Ex. Science, 1982ff) and a comprehensive book on the life and work of EMIL WIECHERT has been published, too (Wilfried Schröder, Emil Wiechert: Geophysicist, Physicists and Organizer in International Science, Bremen: Science Edition,

2000; see also:

<http://huhu.franken.de/history-geophysics/Wiechert.htm>).

Another topic is the research on the german-american relation, e.g. in the cooperation between bauer and wiechert and others. Parts of the work hydrography, coastal research, theoretical geomorphology will be published as soon as possible as parts of its collected papers (for ERTEL visit

[http://huhu.franken.de/history-geophysics/hans\\_ertel.htm](http://huhu.franken.de/history-geophysics/hans_ertel.htm)).

Another point is the development of the ideas of IGY, the discussion and cooperation between BARTELS and CHAPMAN, the influence of BJERKNES, ERTEL, NICOLET, BERKNER, COULOMB, and others of the worldwide cooperation and the interchanges with the foregoing first and second international polar years. CHAPMAN was mostly interested in auroral data from middle and low and since the IGY this part growth up (CHAPMAN, PATON, HOFFMEISTER, SCHRÖDER and others). A special study are under preparation for this, including the aspects of increased airglow and noctilucent clouds. Therefore the work by JAMES PATON and the German CUNO HOFFMEISTER are studied well, including the development made by the research of FOGLE, CHVOSTIKOV, SCHRÖDER, SARONOV, VASILYEV, VILLMAN and WITT. The studies on noctilucent clouds are strongly associated with the rocket measurements since 1962, satellite studies and other in-situ measurements, all this will be studied into a history of upper atmospheric physics. A general history on the noctilucent clouds studies since 1885 has been recently published in *Bulletin American Meteorological Society* (November 2001). Also the development of the idea of the solar wind from the data by HOFFMEISTER from comet tail measurements and

later conclusions by Ludwig Biermann are studied and will be published in the journal of the commission. The complex studies also affiliated with the progress in space physics.

The lives of other German geophysicists has also been recorded, this include JULIUS BARTELS, LUDWIG BIERMANN, HANS ERTEL, MAX ESCHENHAGEN, LEONHARD EULER, WILHELM FOERSTER, CARL-FRIEDRICH GAUß, BENO GUTENBERG, CARL-FRIEDRICH GAUß, HERMANN VON HELMHOLTZ, CUNO HOFFMEISTER, ALEXANDER VON HUMBOLDT, JOHANN VON LAMONT, HELMUT E. LANDSBERG - for his German time with GUTENBERG), OTTO JESSE, ADOLF SCHMIDT, WILHELM WEBER (A book on Weber has been published by the member KARL-HEINRICH WIEDERKEHR), ALFRED WEGENER and others.

The commission welcomes comments, suggestions from all colleagues. Contact

[Geomoppel@t-online.de](mailto:Geomoppel@t-online.de)

and visit the website:

<http://huhu.franken.de/history-geophysics/english.html>.

This series of history of geophysical books, published by Science Edition, D-28777 Bremen, started in 2000. A description of the series and of the first volumes will be given following (if not indicated otherwise, the texts are in English).

Volume 1 comprises the discussion of Hans Ertel's paper on causality, freedom of will and teleology as a problem of natural philosophy. Ertel was father of the well-known Ertel Vorticity theorem, the Ertel Potential theorem, and the Ertel-Euler Equations, and also discussed the problem of weather-forecasting. In this book several authors discuss Ertel's results.

Volume 2 gives a review of the general problems of "History and Philosophy of Geophysics".

Volume 3 presents the papers on Ether by ALBERT EINSTEIN, GUSTAV MIE and EMIL WIECHERT. It includes the letters on this topic by DAVID HILBERT to GUSTAV MIE.

Volume 4 presents biographical sketches of various scientists and their "Pathways to Science", including papers by Sir IAN AXFORD, FRS, ALAN COOK, FRS, SYUIN-I. AKASOFU, GERALD FRIEDMAN *et al.*

Volume 5 discusses the changes in interpretation of aurorae and presents a discussion of the aurora of 1716 March 17 based upon original sources.

Volume 7 (2002) presents the lectures given at the Hanoi Conference on "Solar Variability and Geomagnetism".

These books can be ordered from Science Edition, Hechelstrasse 8, D-28777 Bremen, which also accepts standing orders.

W. SCHRÖDER

*German Commission for the history of Geophysics and Cosmical Physics*

## **South-South Co-operation on environmentally sound Socio-Economic development in the humid tropics. Lista de libros y manuales publicados**

CLÜSENER-GODT, M. & SACHS I. (Eds.), 2000. *South-South Co-operation: Developing to conserve - Reflections in action*. Oxford University Press, India (in preparation), 255 pp.

HUBER, O. AND RIINA, R. (Eds.), 1997. *Glosario Fitoecológico de las Américas*, Vol. 1, UNESCO, 500 pp.

ARAGÓN, L. AND CLÜSENER-GODT, M. (Eds.), 1997. *Reservas da biosfera e reservas extrativistas: con-*

*servação da biodiversidade e ecodesenvolvimento*. Série Cooperação Amazônica No. 18, UNAMAZ, 177 pp.

EMPERAIRE L. (Ed.), 1996. *La Forêt en jeu - L'extractivisme en Amazonie centrale*. UNESCO/ORSTOM, Paris, 230 pp.

CLÜSENER-GODT, M. AND SACHS I. (Eds.), 1995. *Brazilian Perspectives on Sustainable Development of the Amazon Region*. MAB Book 15 UNESCO, Paris, 311 pp

SALINAS, E.; ARAMAYO, X. AND SOLEDAD QUIROGA M., 1994. *Manual de Educación Ambiental*. UNESCO/MAB, CIEC and Academia Nacional de Ciencias de Bolivia, 182 pp.

CLÜSENER-GODT, M. AND SACHS I. (Eds.), 1994. *Extractivismo en la Amazonia Brasileña: Perspectivas sobre el Desarrollo Regional*, 96 pp.

ARAGÓN, L. (Ed.), 1994. *Proceedings of the International Symposium: "What Future for the Amazon Region?"*, Institute of Latin American Studies, Stockholm University, 204 pp.

RUIZ MURRIETA, J., 1993. *Alimentos del Bosque Amazónico*, UNESCO, 225 pp.

UITTO, J. I. & CLÜSENER-GODT M., 1993. *"South-South Co-operation on Environmentally Sound Socio-Economic Development in the Humid Tropics: Perspectives from Asia and Africa"*, UNU, 180 pp

ARAGÓN, L., (Ed.), 1993. *Desenvolvimento Sustentável Nos Trópicos Húmedos*, Série Cooperação Amazônica No. 13, Vol. 1 and 2., UNAMAZ, 634 pp.

CLÜSENER-GODT, M.; SACHS, I. & UITTO, J. I. (Eds.), 1992. *Final Report of the Conference on "Environmentally Sound Socio-Economic Development in the Humid Tropics"*, Manaus, Brazil, 13 - 19 June 1992. UNESCO/MAB, UNU, TWAS, UNAMAZ, INPA, 52 pp.

# GACETA

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En la Gaceta aparecerán notas editoriales, reseñas de libros, boletines de adquisición de la Biblioteca, noticias sobre las publicaciones de la corporación, pequeños artículos de interés general y otras secciones más, a las cuales están invitados a contribuir todos los académicos. La fecha límite para recibir información o reportes es el último día hábil de cada mes. De ser posible pedimos que las contribuciones se procesen y envíen en disquete, utilizando uno de los siguientes procesadores de palabras para IBM-PC o compatibles: Word Perfect, Microsoft Word o Word de Windows. Se permite copiar o reproducir parcial o totalmente el material publicado en la Gaceta siempre y cuando se haga referencia a su lugar de origen y se envíe una copia de la publicación a la Academia.

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