

INTERNATIONAL NEWSLETTER 3: SPRING 1992

The purpose of this Newsletter is to communicate news about activities in structural geology and tectonics from all over the world, and to provide a mouthpiece for the newly formed *International Association of Structural/Tectonic Geologists (IASTG)*. As there may be many IASTG members who do not have access to the *Journal of Structural Geology*, I invite *JSG* readers to copy this and other newsletters to any colleagues and contacts who they think may be interested. This way, I hope that we can achieve a good worldwide circulation of news about the IASTG, and about activities in structural geology and tectonics around the world.

The *International Newsletter* is open to everyone. It provides conference organizers with a world-wide means of communicating their 'first circulars', provides regular 'slots' for national groups to report their activities (past and future), and can give reports or short notices of various kinds. However, direct advertising of services or items for sale, giving prices, etc., is not accepted.

Please send information, articles and suggestions to me at any time. Secretaries of national structural/tectonic groups are urged to send me information on a regular basis, without being reminded. Conference organizers should send their notices as early as possible, and include the abstract deadline date, to be of most use around the world.

At present, the newsletters are twice-yearly, called Spring and Autumn (apologies to those of you in the southern hemisphere!), and will work with deadlines for material of *mid-June* and *mid-December*. The next Newsletter will be Autumn 1992.

Thank you to everyone who has contributed information to this Newsletter.

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INTERNATIONAL ASSOCIATION OF STRUCTURAL/TECTONIC GEOLOGISTS (IASTG) PROGRESS REPORT JANUARY 1992

During 1991, the IASTG has blossomed from its infancy to a fully fledged group whose membership on 20 January 1992 stands at 706. I should like to thank everyone for their support of the aims of the IASTG, which has been demonstrated by all the applications for IASTG membership, and by donations to the IASTG Fund. I have received many delightful letters of support, for which I am very grateful.

IASTG publicity

The main IASTG publicity has been through the initial article in *Journal of Structural Geology* in 1990 (Vol. 12, No. 8), which contained the first IASTG Membership Form, and reports in the previous *International Newsletters*; 1 in *JSG* (1991) Vol. 13, No. 3; and 2 in (1991) Vol.

13, No. 8, which included another IASTG form. In addition, a membership form followed an article about IASTG by Paul Hancock in *Episodes* (Vol. 13, No. 3), and others were included in several newsletters of regional structural/tectonic divisions and groups. All are appreciated for spreading news about the IASTG.

I have taken or sent poster displays about the IASTG and its progress to the following meetings: the John Ramsay Meeting (Zurich, Switzerland), the Australian SGTSG (Margaret River, Australia), Geological Society of America (San Diego, U.S.A.) and Tectonic Studies Group (Edinburgh, U.K.).

I have been invited to contribute a progress report on the IASTG, at an informal Workshop entitled 'Future Perspectives in Structural Geology', at the International Geological Congress at Kyoto (Japan, August 1992). By this time, the IUGS Executive Committee will have decided whether to approve the application for IUGS Affiliation, and if approved this will be ratified at Kyoto.

The IASTG Fund: donorship and expenses

The following organizations are thanked (in order of arrival) for their donations to the 'IASTG Fund', which have been vital to the foundation of this new International Association during 1991: Tectonic Studies Group of Britain; Tectonic Research Group of Japan; Carpentaria Exploration, Australia; Shell Research (KSEPL), The Netherlands; Maxwell Communications (U.K.); British Petroleum (U.K.); Shell Expro (U.K.); Conoco (U.K.); Australian SGTSG; SG&T Division, Geological Association of Canada; W. D. Means (U.S.A.); Unocal International; Tectonic Division, Geological Society of South Africa; Teikoku Oil Company, Japan; T. Uemura (Japan); E. Willemse (Denmark); SG&T Division, Geological Society of America.

The total sponsorship received by 20 January 1992 is £5040.97. This has allowed there to be expenditure on secretarial help with enrolment of members, from October 1991 onwards. The IASTG Fund now contains sufficient to underwrite the costs of producing a Directory of IASTG Members in the imminent future.

The IASTG Directory

Plans are well underway to produce the first international directory of structural/tectonic geologists, using the information provided by the enrolled IASTG members. At the time of my last report (Newsletter 2), I stated: "Details about the Directory, its cost to members, and how it can be obtained, will appear in the next newsletter". The good news for members is that there is sufficient in the IASTG Fund to underwrite printing and mailing of the Directory to all members, without any required payment! I expect to produce the Directory during February 1992, and mail it to members during March.

The Directory will include in its Preface a request for a *voluntary subscription in retrospect*, from those who are able to pay. That way, it is optimistically hoped that we can replenish the IASTG Fund ready for another venture.

Thanks go to all groups, companies and individuals

who have contributed to the IASTG Fund so far. Your support has enabled the Directory to materialize from a proposal to a reality.

IASTG Backing Committee: P. Bankwitz (Germany), K. Birkenmajer (Poland), J.-P. Burg (France), R. Butler (U.K.), M. P. Coward (U.K.), G. A. Davis (U.S.A.), S. K. Ghosh (India), P. L. Hancock (U.K.), X. Ma (China), W. D. Means (U.S.A.), G. Mitra (U.S.A.), C. W. Passchier (The Netherlands), R. A. Price (Canada), T. Shimamoto (Japan), J. Tullis (U.S.A.), T. Uemura (Japan), W. Wallbrecher (Austria), K. Weber (Germany), P. F. Williams (Canada).

Honorary Treasurer E. H. Rutter (Manchester)
Secretarial Assistant B. Ward (Manchester)

Susan H. Treagus *IASTG Convenor*
Manchester, U.K.

HAPPY BIRTHDAY TO JOHN RAMSAY

A meeting on *The Geometry of Naturally Deformed Rocks* was held on 9–11 September 1991 at ETH, Zurich, Switzerland, as a celebration of John Ramsay's 60th birthday last year. Three days of invited and volunteered talks (48 in all) were combined with displays of 96 posters in the ETH Geological Institute. The meeting was preceded and followed by week-long field trips in the Swiss Alps, led by John Ramsay himself. More than 300 people attended the meeting, of which 60 or more were past or present 'Ramsay students'.

The three days of talks on *The Geometry of Naturally Deformed Rocks* were divided into theme sessions, starting off with *Folding*—a subject closely associated with John Ramsay since his earliest papers. Next came *Fractures*, then *Strain and displacement*, and *Alps* completed the first day. Day 2 began with *Palaeomagnetism*, and the second session was given to *Poster presentations*. John Ramsay's own poster 'Geological Mapping' was a highlight, as it contained samples of his geological maps over the years, from B.Sc. mapping in Wales, Ph.D. in Scotland, to more recent Alpine work. *Structure in plutons* and *Fault geometry* comprised the afternoon sessions of Day 2. The third day brought *Experimental rock deformation and deformation mechanisms*, then *Image analysis, fractals, chaos*; the final afternoon had two sessions on *Tectonics*. During the 3 days, visits were organized within the Geological Institute, to see the Texture Goniometer, and the Rock Deformation and Wax Model Deformation Laboratories.

In addition to the intellectual components of this meeting, there was a wonderful air of celebration and affection for John Ramsay throughout, which overflowed on two principal occasions. On the first evening there were 'Happy Birthday' speeches by Paul Hancock (speaking for TSG, U.K.), Robert Shackleton (speaking, he said, for the older generation) and Mike Coward (speaking for a younger, though itself greying, generation). All spoke of John's immeasurable contribution to structural geology, and of his role in founding TSG in Britain. Their many anecdotes were a clear tribute to the affection John has shown and received from a multitude of students, colleagues and friends. This Happy Birthday celebration was followed by an 'Open Buffet' laid on by students in the Geology Department, which provided a perfect atmosphere to talk, eat, drink and look at posters.

The second social celebration at the meeting was the 'Conference Dinner', held in one of the historic Guild Halls

in Zurich. After the dinner, Rudolf Trumpy spoke warmly of his association with John Ramsay at Zurich, and John responded with a speech. He began by recalling important teachers in his childhood, who awakened his interests in poetry and music. (Our conference packages included a collection of his poems entitled 'Geolities', a selection of personal and geological writings, some irreverent or humorous, others more spiritual.) John recalled his musical career during National Service; having to decide whether to become a professional musician or a scientist; the difficulties of entering an over-subscribed geology degree course (which he overcame by a sideways approach through chemistry!). He ended his speech with a tribute to his father, by reciting one of his cockney-slang poems, 'Farver'.

John Ramsay will be retiring from ETH in April 1992, but his work in structural geology will continue. The Meeting Abstracts are published as *Mitt. aus. dem. Geol. Inst. ETH Zurich, Neue Folge*, 239b, 1991. A collection of papers from the meeting will be published in the *Journal of Structural Geology* in early 1993.

INTERNATIONAL MEETINGS

Mechanical Modelling of Crustal Structures: Significance for Petroleum Exploration

11–13 May 1992; Rennes, France

(See International Newsletter 2; *J. Struct. Geol.* Vol. 13, No. 8.)

Contact: P. R. Cobbold and J.-P. Brun (Modelling Conference), Institut de Géologie, Université de Rennes, 35042 Rennes Cédex, France. Fax: 99 28 67 80.

International Symposium on the Karakorum and Kunlun Mountains

5–9 June 1992; Kashi, China

The ISKMM is co-sponsored by the Chinese Academy of Sciences, the National Natural Science Foundation of China and the Centre National de la Recherche Scientifique, France. The Symposium is organized jointly by the Integrated Scientific Expedition to Qinghai-Xizang Plateau, CAS, and the Centre for International Scientific Exchanges. The topics of the ISKMM include geology, tectonics, environmental changes, fauna and flora, natural resources and conservation. A post-symposium excursion will be arranged from Kashi, via Taxkorgan to the Khunerjab Pass.

Contact: Zheng Du, Institute of Geography, CAS, Building 917, Datun Road, Beijing 100101, China. Or: Jiang Shuling, Fax: 01 8011095.

International Field Meeting: Ductile Shear Zones in Highly Metamorphosed Rocks

15–26 June 1992: Apatity (Kola Peninsular), Russia

The meeting will consist of three parts: field excursions (16–19 June), discussion and poster presentations (20–22 June), and (optional) individual field work (23–25 June). (See International Newsletter 1; *J. Struct. Geol.* Vol. 13, No. 3 for a fuller description.)

Contact: V. Alekseev, Geological Institute, Fersman str. 14, 184200 Apatity, Russia. Telex: 126129 KOLSC SU.

29th International Geological Congress (IGC)

24 August–3 September 1992; Kyoto, Japan

(For full structural and tectonic programme, see International Newsletter 2; *J. Struct. Geol.* Vol. 13, No. 8.)

Information and Third Circular: 29th IGC, P.O. Box 65, Tsukuba, Ibaraki 305, Japan. Fax: 81 298 54 3629.

AGU Chapman Conference: Tectonics and Topography
31 August–4 September 1992; *Snowbird, Utah, U.S.A.*

Topics to be discussed include the effects of climate change and active tectonics on topography, plate-scale tectonics, feedback between crustal dynamics and surface processes, and current approaches to modelling geomorphology.

Abstract deadline: 2 April 1992.

Contact: AGU Meetings, 2000 Florida Ave, N.W., Washington, DC 20009, U.S.A. Fax: 202 328 0566.

Basin Inversion

5–7 October 1993; *Oxford, U.K.*

Basin inversion is a major factor in prospectivity of many hydrocarbon provinces in the world. Tectonic inversion is important in structure formation, fluid migration, fault sealing, source rock maturity, top seal integrity and basin evolution in general. This conference aims to bring together people who are interested in all these topics.

Contact: P. Buchanan, CogniSeis Development, Stanley House, Kelvin Way, Crawley, Sussex RH10 2SX, U.K. Fax: 0293 515344.

TECTONICS DIVISION OF GEOLOGICAL SOCIETY OF SOUTH AFRICA (T'DOGS)

T'DOGS was formed in 1984 along the lines of TSG, U.K., and membership currently stands at around 170, including members in Australia, Botswana, Namibia, Zimbabwe and the U.K. The Division organizes short courses, and commonly joins forces with local branches of the Geological Society of South Africa, or individual university departments. For example, T'DOGS is currently working with Maarten de Wit (Cape Town) on a field workshop *Inversion Tectonics of the Cape Fold Belt*. In the past, the Division co-operated with the Barberton Branch of GSSA to organize a short course *The role of shear zones in the deformation and mineralization of the Archaean of southern Africa*.

T'DOGS holds a 1-day annual meeting in January or February, where post-graduate students are encouraged to participate, and this is usually followed by a field trip.

For more information, contact S. McCourt, Chairman, T'DOGS, Department of Geology, University of Pretoria, 0083 Hillcrest, Pretoria, South Africa.

STRUCTURAL GEOLOGY AND TECTONICS DIVISION, GEOLOGICAL SOCIETY OF AMERICA

The 1991 GSA Annual Meeting at San Diego hosted a large number of structural geology and tectonics sessions, plus two special events: a Symposium on *Strike-slip faults* organized by A. Sylvester, and a Short Course on *Deformation and kinematics of high strain zones*, by Carol Simpson and Declan De Paor.

The SG&T Division gave their *Career Contribution Award* to Clinton Dahlstrom (Chevron Corporation, retired), with the citation made by Steven Boyer. The *Best Paper Award* was given to Terry Pavlis (Orleans) for 'The

role of strain heating in the evolution of megathrusts' (1986, *J. geophys. Res.* 91) (citationist Ron Bruhn). The Chair of the Division for 1992 is Darrel Cowan (Washington). The Division voted to support the IASTG by making an annual donation to the IASTG Fund from its membership dues.

The proposed Division-sponsored Short Course for the 1992 GSA Annual Meeting is by W. D. Means: *How to do anything with Mohr circles—a short course about tensors for geologists*.

GSA Annual Meetings

26–29 October 1992; *Cincinnati, Ohio.*

25–28 October 1993; *Boston, Massachusetts.*

1992 Penrose Conferences

Continental tectonics and magmatism of the Jurassic North American Cordillera: 28 March–3 April 1992

Contact: D. M. Miller, U.S. Geological Survey. Fax: 415 329 4936.

The origin and evolution of the Coast Mountains, British Columbia, Yukon and Alaska: 17–22 May 1992; *Whistler, British Columbia*

Contact: G. E. Gehrels, University of Arizona. Fax: 602 621 2672.

Late Precambrian tectonics and the dawn of the Phanerozoic: October; *Death Valley, California*

Contact: I. Dalziel, University of Texas at Austin. Fax: 512 471 8844.

Applications of strain, from microstructures to mountain belts: 9–13 September 1992; *Nova Scotia*

This Penrose Meeting is convened by Scott Paterson (Southern California) and Mark Brandon (Yale) to address the application of modern strain analysis to real geological problems. Over the past two decades, a variety of methods for measuring total and incremental strain have been developed, but while concepts of strain analysis are widely taught, their application in actual field studies are less common, and mainly limited to a few well-studied regions. Such applications give rise to many questions, such as which part of the deformation history a particular strain measurement technique might record, or how we can distinguish pre-tectonic and/or volumetric strains.

The conference will be held at Liscombe Lodge on the east coast of Nova Scotia, and will comprise 2½ days of keynote and volunteered sessions encompassing the following: new methods of strain analysis, including computer-assisted; strain partitioning and microscale deformation mechanisms; volume strains and solution mass transfer; strain fields and macroscale structures; orogen-scale deformation including fault-related strain; integration of strain into geomechanical models.

The conference will be followed by 2 days of field excursions. Jack and Marietta Henderson and Tom Wright will demonstrate strain markers used to elucidate the deformation history in the Meguma Group, and Paul Williams will show how folds, vein arrays and porphyroblasts between Liscomb Harbour and Chedabucto Bay are indicative of transpressive shear.

Prospective participants should send a letter of application to one of the convenors, and indicate the proposed title of their contribution. Oral presentations will be limited, so posters are strongly encouraged.

Application deadline: 15 April 1992.

Contact: M. B. Brandon, Department of Geology and Geophysics, Yale University, New Haven, CT 06511-8130, U.S.A. Fax: 203 432 3134.

Information for the SG&T Division Newsletter should be sent to Greg Davis/Scott Paterson (Editors), Department of Geological Sciences, University of Southern California, Los Angeles, CA 90989-0740, U.S.A. Fax: 213 740 8801.

Further information on all GSA Meetings: The Meetings Department, GSA, P.O. Box 9140, Boulder, CO 80301, U.S.A.

STRUCTURE AND TECTONICS GROUPS, CANADA

The annual meeting of the Canadian Tectonics Group was held in Magog, Quebec, in October 1991, and attended by 51. The CTG *Best Paper* prize was awarded to Carol Evenchick (Geological Survey of Canada, Vancouver) for 'Geometry, evolution and tectonic framework of the Skeena Fold Belt, north-central British Columbia' (*Tectonics* 10, 527–546).

The Structural Geology and Tectonics Division of the Geological Association of Canada plans to sponsor the following sessions at the annual GAC Meeting in Edmonton in 1993: *Extensional tectonics in the northern Cordillera*, organized by D. Brown; *Deformation mechanisms and models*, organized by F. Fueten, P.-Y. Robin and S. Cruden; and *Glaciotectonics*, organized by W. Langenberg and M. Fenton. In addition, a Short Course, *Microcomputer applications in structural geology* will be offered by H. Charlesworth.

Forthcoming meetings

GAC Annual Meeting: 25–27 May 1992; Wolfville, Nova Scotia

This will include special sessions on *Ductile and brittle faulting in the northern Appalachian*, organized by P. F. Williams and R. J. Knipe, and *High strain-rate behaviour of geological materials*, by J. G. Spray. The field trip on the strain history in the Meguma Group (27–29 May) was advertised in the previous International Newsletter (*J. Struct. Geol.* Vol. 13, No. 8).

CTG Annual Meeting: 23–25 October 1992; Nordegg, Alberta

This meeting, organized by P. Erdmer and W. Langenberg, will take place in a rustic log-cabin-style retreat in the forest foothills of the Rockies. Field trips will highlight the structures and geology of Mesozoic rocks of the Foothills clastic wedge, and of the Palaeozoic Front Ranges.

Contact: P. Erdmer (see below).

For further information on Canadian activities, consult *The Main Thrust*, Newsletter of the SG&T Division of GAC, or contact Philippe Erdmer, Division Secretary, Department of Geology, University of Alberta, Edmonton, AB, Canada T6G 2E3. Fax: 492 2030.

TECTONIC STUDIES GROUP, U.K.

Forthcoming meetings

Structural geology and mechanics of volcanoes and sub-volcanic intrusions: 13 May 1992; Liverpool University

A joint meeting with the Volcanic Studies Group, and followed by a field trip to Ardnamurchan.

Contact: S. Day, Department of Earth Sciences, University, Liverpool L69 3BX, U.K. Fax: 051 794 5170.

Neotectonics—recent advances: 16–17 June 1992; Burlington House, London

A joint meeting of TSG with the Quaternary Research Association and the INQUA Neotectonics commission.

The meeting will cover the following themes: palaeoseismicity and hazards; neotectonics and landform change; neotectonics and geophysics; neotectonics and climatic change.

Contact: I. S. Stewart, Division of Geography & Geology, West London Institute H.E., Isleworth, Middlesex TW7 5DU, U.K. Fax: 081 569 9198.

TSG Annual Meeting: 14–16 December 1992; University of Southampton

Abstract deadline: 17 October 1992.

Contact: D. J. Sanderson, Department of Geology, University of Southampton, Southampton SO9 5NH, U.K.

For general information on TSG, consult *Geoscientist* (formerly Geol. Soc. [London] Newsletter), or contact Dave Prior, TSG Secretary, Department of Earth Sciences, University of Liverpool, P.O. Box 147, Liverpool L69 3BX, U.K.

SHORT NOTICES

Structural Geology, Slovakia

The Structural Geology Group of the Slovak Geological Society organizes annual meetings and excursions, and aims to co-ordinate structural and tectonic research in the Western Carpathians and in Slovakia. Ondrej Samuel, President of the Slovak Geological Society, and Dusan Plasienska, leader of the Structural Geology Group, welcome international communication and co-operation. Both may be contacted at 817 04 Bratislava, Mlynska Dolina 1, Czechoslovakia.

Tectonics and Structural Geology, Norway

For information on the activities of the Tectonic and Structural Geology Studies Group of Norway, contact A. G. Koestler (Chairman), Geo-Recon A.S., Bernhard Herresvei 3, N-0376, Oslo, Norway.

Structural Geology and Tectonics, Australia

For information on the activities of the Australian Specialist Group in Structural Geology and Tectonics (SGTSG), contact S. F. Cox, Chairman, SGTSG, Research School of Earth Sciences, ANU, G.P.O. Box 4, Canberra, ACT 2601, Australia. Fax: 06 249 0738.

South & West Asian Newsletter

AGID's South & West Asian Geoscience Newsletter is co-sponsored by UNESCO and the Association of Geoscientists for International Development (AGID). Anyone who is interested in promoting the role of geoscientific resources in the economic progress of the Developing Countries can join the AGID.

AGID address: c/o AIT, P.O. Box 2754, Bangkok 10501, Thailand. Fax: 66 2 516 2126.

Newsletter: S. D. Limaye (Hon. Ed.), Ground Water Institute, 2050 Sadashiv Peth, Poona (Pune), 411 030 India. Fax: 91 212 420594.

Diwa Tectonics, China

An International Research Center for Diwa Tectonics and Metallogeny has been established at Changsha in the Institute of Geotectonics, under the directorship of Chen Guoda. Current activities include work with the Commission on Tectonics of Ore Deposits (CTOD) on 'Tectonomagmatic activation (Diwa)', and a delegation to the Second International Symposium on Activation Zones (Diwa structures) and their Metallogeny, in Blagoveshchensk, Russia, in August 1991.

Contact: Li Jian, Changsha Institute of Geotectonics, Changsha, Hunan, 410013 China.

Macintosh applications

Declan De Paor and Carol Simpson have established a shareware and courseware development and distribution company, 'Earth'nWare', specializing in Macintosh applications for earth scientists. The shareware programs will be distributed for a nominal fee. The courseware is geared towards academics and industrial training officers, and includes manuals which serve as mini-textbooks. In addition to distributing their own work, De Paor and Simpson are interested in hearing from IASTG members who wish to have their Macintosh programs listed in the Earth'nWare catalog. For all further information, contact D. De Paor and C. Simpson, 4514 Dresden Road, Baltimore, MD 21208, U.S.A.

Stereographic nets

The Department of Earth Sciences at Liverpool University can provide a range of Lambert and Wulff nets suitable for teaching or research use. Three types of projection in two net sizes are available, either individually or in 100 packs. These are: Lambert equal-area nets, equatorial projection, 20 or 10 cm diameter; Lambert equal-area nets, polar projection, 20 or 10 cm diameter; Wulff stereonet, equatorial projection, 20 or 10 cm diameter.

For further information, contact N. C. Hunt (Nets), Department of Earth Sciences, Liverpool University, Liverpool L69 3BX, U.K.

VLADIMIR VLADIMIROVICH BELOUSOV

With great sorrow and regret we have to inform you that after a short but grave illness, Professor Vladimir Vladimirovich Belousov, Corresponding Member of the U.S.S.R. Academy of Sciences, died on 25 December 1990, aged 83. He was President of the Soviet Geophysical Committee, Professor of the Moscow State University and Leading Scientist of the Institute of Physics of the Earth. He was a Fellow of Swedish, Indian and New York academies, a Member of Geological Societies of London, America, France, Belgium and India, and Doctor Honoris Causa of Newcastle University (U.K.) and Leipzig University.

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