

CO-SPONSORED BY UNESCO



**ASSOCIATION OF GEOSCIENTISTS**  
**FOR INTERNATIONAL DEVELOPMENT (AGID)**  
**GEOSCIENCE NEWSLETTER**

**AGID HEADQUARTERS & AGID PRESIDENT: MS AFIA AKHTAR**, Director General, Geological Survey of Bangladesh  
Segunbagicha, Dhaka 1000, Bangladesh. Tel: +88 02 8314810-14, E-mail: [afia@dhaka.agni.com](mailto:afia@dhaka.agni.com)

**OFFICE OF THE PAST PRESIDENT AND EDITOR: DR. SHRIKANT D. LIMAYE**, Director, Ground Water Institute  
2050 Sadashiv Peth, Pune 411030, India. E-mail: [limaye@vsnl.com](mailto:limaye@vsnl.com)

**SECRETARY - TREASURER: DR. A J REEDMAN**, Director (Retd.), British Geological Survey  
15, Malvern Rd, Mapperley, Nottingham, NG3 5GZ UK. E-mail: [antony@areedman.wanadoo.co.uk](mailto:antony@areedman.wanadoo.co.uk)

**AGID VICE PRESIDENTS: DR. A B MACEDO**, Brazil, <[abmacedo@usp.br](mailto:abmacedo@usp.br)>; **DR. SANDRA BARR**, Canada, <[sandra.barr@acadiu.ca](mailto:sandra.barr@acadiu.ca)>;  
**PROF. VIQAR HUSAIN**, Pakistan, <[prof.viqarhusain@yahoo.com](mailto:prof.viqarhusain@yahoo.com)>, <[segmite@gmail.com](mailto:segmite@gmail.com)>

**DR. GBENGA OKUNLOLA**, Nigeria, <[gbengaokunlola@yahoo.co.uk](mailto:gbengaokunlola@yahoo.co.uk)>; **DR. VACLAV NEMEC**, Czech Republic, <[lidmila.nemcova@quick.cz](mailto:lidmila.nemcova@quick.cz)>

**AGID Website: [www.bgs.ac.uk/agid/](http://www.bgs.ac.uk/agid/)**

**GROWNET Website: [www.igcp-grownet.org](http://www.igcp-grownet.org)**

**61ST ISSUE - JUNE 2011** FREE Circulation of the Newsletter : 700 copies sent by Air Mail to over 35 countries.

**FROM EDITOR'S DESK**

AGID's effort to bring several Symposia on topics of practical importance to low-income countries, into the scientific program of the 34<sup>th</sup> IGC (5-10 August 2012, Brisbane, Australia.) have been successful and the Organizing Committee has accepted the following 8 symposia under Theme 2 "Geoscience benefiting Low-Income countries". Incidentally, Theme 2 has been entrusted to AGID and is being coordinated by an 'all AGID group' comprising Ms Afia Akhtar, Dr Antony Reedman, Dr Mike Katz and Myself. The details of the Symposia are as follows:

**Theme 2: Geoscience Benefiting Low Income Countries** [Association of Geoscientists for International Development, AGID]

Coordinators: Mike KATZ [m.katz@unsw.edu.au](mailto:m.katz@unsw.edu.au) (Australia), Shrikant LIMAYE (India), Afia AKHTAR (Bangladesh) and Antony REEDMAN (UK)

This Theme recognizes the importance of creating social awareness and capacity building in low income countries, in relation to groundwater management and rural health; geohazards; climate change; medical geology for human survival and welfare; geo-planning for urban development and infrastructure; role of geosciences in protecting ecosystems; geoethics; role of women geoscientists in resource development; construction and industrial minerals; production of mineral and energy resources.

The following 8 Symposia would be organized under this Theme:

**2.1 Improving rural health and mitigating rural poverty through sustainable ground water development**

Shrikant LIMAYE [limaye@vsnl.com](mailto:limaye@vsnl.com) (India) and Afia AKHTAR (Bangladesh)

The focus of this Symposium is on highlighting experiences, in groundwater development and management, gained through work on projects/ programs of providing irrigational supply and/or safe quality drinking water supply from dug wells, bore wells and tube wells, in various hydrogeological, agro-climatic and socio-economic situations in low income countries. The Symposium is connected with UNESCO-IUGS-IGCP Project 523 "GROWNET" ([www.igcp-grownet.org](http://www.igcp-grownet.org)). The Symposium invites papers on experiences in managing and conserving groundwater resources and ensuring sustainability of the quality and quantity of groundwater, for improving rural health and rural economies.

**2.2 Creating social awareness, preparedness and capacity-building for mitigating geohazards**

Karen VILLHOLTH [kgv@geus.dk](mailto:kgv@geus.dk) (Denmark), Shrikant LIMAYE (India), and Antony REEDMAN (UK)

Earth sciences have much to contribute to the reduction of risks from GeoHazards caused by natural

Anyone interested in promoting the role of geoscientific resources in the economic progress of the Developing Countries can join the AGID. Membership Application Form should be xeroxed from page no.7. The Ordinary membership dues are US \$ 3.00 per year for a person from a Developing Country. (\$ 30 for Life Membership) Dues are paid by Bank Draft in favour of AGID, to the AGID Head Office or to the AGID Councillors or designated agents in Asia. The Past President's office also accepts payment of Rs. 150/- (Indian Rupees) for Ordinary Membership and Rs. 1,500/- for Life Membership, at the address given above.

**LIFE MEMBERSHIP FEE FOR A GEOSCIENTIST FROM A DEVELOPING COUNTRY IS Indian Rs. 1,500 ONLY.**

processes and anthropogenic activities. In the 21st century, the global population will approach 10 billion people and climate change will have a significant effect on the health, safety and wellbeing of societies, especially in low-income countries and poor communities.

This is a multidisciplinary Symposium whose goal is dissemination of best practices in reducing the impact of geohazards in low-income countries and poor communities. It will focus on the hard-learned experiences in creating public awareness, capacity building in the Public Sector, and initiating actions in low-income countries. But examples from elsewhere are welcome, with the intent of providing a forum where geoscience practitioners can learn how to effectively translate science into action

### **2.3 Developing geoscience education and awareness for the benefit of society**

Nurul HASAN mn\_hasan@ymail.com (Bangladesh), Mike KATZ (Australia), Gbenga OKUNLOLA (Nigeria), Antony REEDMAN (UK) and Chris KING (UK)

It is the wish of all people to live in safe and healthy communities with a prospect of increasing prosperity. A safe supply of potable water, a sustainable food supply and a wide range of other natural resources are required to attain this ambition and ensuring their availability draws heavily on geoscientific knowledge. This Symposium seeks to expose innovative ideas and projects, working both through the formal education system and informal community networks, that seek to raise geoscience awareness amongst the people.

### **2.4 Geo-planning for urban development and infrastructure and protecting ecosystems**

Afia AKHTAR afia@agni.com (Bangladesh), Mehedi Ahmed ANSARY (Bangladesh), Shrikant LIMAYE (India), Sospeter MUHONGO (Tanzania) and Gbenga OKUNLOLA (Nigeria)

Cities of low income countries are expanding rapidly without incorporating geoscience data. The reconstruction of large number of cities is needed for improvement of infrastructure. Appropriate geoscience studies will help in investigation and appraisal of reconstruction of old cities and development of new cities by providing a scientific basis for planning and construction. But these development activities may destroy ecosystems if proper attention is not paid to protecting the natural environment, conserving natural resources and mitigating adverse effects of hazards. A multidisciplinary approach is needed for protection of

ecosystems. Papers are invited in consideration of geohazards, geo-environment and geotechnical conditions for urban planning and development.

### **2.5 Geoethics**

Vaclav NEMEC lidmila.nemcova@quick.cz (Czech Republic), Jesus MARTINEZ-FRIAS (Spain), Nataliya NIKITINA (Russia), Niichi NISHIWAKI (Japan) and Silvia PEPPOLONI (Italy)

Abstracts are invited on the theory and practice of geoethics, which recognizes the necessity of an ethical attitude to the geosphere and of finding ways to solve ethical dilemmas primarily in connection with natural hazards (including risk of unavoidable disasters), sustainable use of Earth resources and space exploration. Education is essential for facilitating responsible decision-making based on integration of moral and cultural values with social, environmental, technical and economic considerations.

### **2.6 Role of women geoscientists in resource development**

Afia AKHTAR afia@agni.com (Bangladesh), Madhumita DAS (India), Ezzoura ERRAMI (Morocco), Mike KATZ (Australia), Sharon LOCKE (USA) and Antony REEDMAN (UK)

In most countries in the past, women have been under-represented in the geoscientific professions. How and why is this now changing, how can change be accelerated and does the position of women in society allow them to play a special role in natural and human resource development ? Papers, with special reference to low-income countries, addressing such questions and discussing innovative policies and projects relating to women in geoscience are invited for this Symposium.

### **2.7 Mineral and energy resources, construction and industrial minerals**

Mike KATZ m.katz@unsw.edu.au (Australia), Afia AKHTAR (Bangladesh), Gbenga OKUNLOLA (Nigeria) and Nehal UDDIN (Bangladesh)

Sustainable socio-economic infrastructure of a nation is an indication of its richness in mineral resources, technological know-how, and capability in extracting and utilizing those resources in development activities. Low income countries are behind in development activities due to lack of good economic condition and properly educated human resources in geosciences. Large and wide varieties of fuel and non-fuel mineral, construction and industrial minerals are insufficient to satisfy growing demand because of substantial increase in consumption. A strong economy can be related to the growth of mineral based

industries. Robust investment in this sector can become the main engine of an economy. The Symposium will attempt to formulate guidelines to address these issues.

## **2.8 The role of Geological Surveys in the development and management of natural resources, groundwater and disaster risk reduction**

Antony REEDMAN antony@areedman.wanadoo.co.uk (UK), Afia AKHTAR (Bangladesh), David DENHAM (Australia), Siyan MALOMOS (Nigeria) and Qincheng HE (Thailand)

Most countries have established Geological Surveys or similar organisations that are responsible for supplying the geological information required to aid the development and management of national georesources and the reduction of risks from geohazards. In many low-income countries the collection and dissemination of national geological data and information suffers from a lack of financial resources and trained personnel. This Symposium seeks examples of projects, both international and domestic, aimed at overcoming these difficulties and producing sustainable outcomes assuring the future provision of nationwide geological data and information.

I request our readers to start preparing technical papers for being presented in any of the above 8 symposia.

**Dr. Shrikant D. Limaye**  
Hon. Editor, AGID Newsletter

## **C O N G L O M E R A T E**

### **GeoEthics at GEOITALIA 2011**

GeoItalia (19-23 September 2011 - Turin, Italy), is the most prestigious annual Geoscience Congress in Italy. This year, the Theme of GeoItalia 2011, to be attended by more than 1500 participants from 25 countries, is 'Earth Science for Sustainable Development'. Due to the efforts of Dr Silvia Peppoloni, a GeoEthics expert at National Institute of Geology and Volcanology in Italy, the Congress will host a special session devoted to Geoethics, thanks to the numerous abstracts received for this session (more than 30). Geoethics will occupy a prominent place in GeoItalia congresses in future, indicating growing interest in Italy and other countries for Geoethics issues. Dr Silvia is also a co-convener for the GeoEthics symposium to be held at the 34th IGC in Brisbane

The topics to be discussed at GeoEthics session in GeoItalia 2011 include:

- Comparison between the global geological-geoethical problems;
- Rational and sustainable use of

geo-resources; • Proper means for dissemination of results of scientific studies and responsible; • Public information on the risks; • Improving relations between the scientific community, mass media and the public; • Getting support of policy decisions; • Organization of effective teaching tools to develop awareness, values and responsibilities; • Transfer of the cultural value of the environment to those who inhabit it; and • Promotion of working groups within the university and professional associations, for developing GeoEthical practices for internal and external communications and for dealing with colleagues.

### ***“Oath for Geoscientists”***

A Committee on Geoethics formed by the FIST (Federazione Italiana di Scienze della Terra - Italian Federation of Earth Sciences) will soon propose the introduction of an “Oath for Geoscientists”, similar to the ‘Hippocratic Oath’ for doctors, which every new geologist will have to take solemnly at the Convocation Ceremony of getting the degree in Geoscience. Dr Silvia is a member of this Committee.

Further information: Website: <http://www.geoitalia.org> and E-mail contact: [silvia.peppoloni@ingv.it](mailto:silvia.peppoloni@ingv.it)

### **2<sup>nd</sup> Circular of the 34<sup>th</sup> I.G.C. (5-10 August 2012, Brisbane, Australia. )**

The Second Circular of the 34th IGC 2012 Brisbane, Australia, has been released on Tuesday 24 May 2011. This is an important stage in the development of the 34th IGC. The Second Circular is being distributed electronically and posted on the IGC website at: <http://www.34igc.org>. Geoscientists should regularly visit the website for information updates. The Second Circular includes:

Scientific themes and symposia: The Organizing Committee received literally hundreds of suggestions for symposia and scientific sessions and thanks go to all contributors. The Second Circular includes a full list of symposia and topics to be presented at the congress, under the 37 themes of Scientific Program.

Super Early Bird registration fee offer: Make sure you read about the Super Early Bird registration offer in the Second Circular. This significantly reduced registration fee (\$895 for single delegates, \$850 for 3 or more delegates to a maximum of 20 from the same organization) will only be available until September 2011, or until 500 delegates register at this rate - whichever comes first. This offer represents the lowest cost registration fee that will ever be available for the 34th IGC.

Exhibition Space Release: At the 34th IGC the exhibition area will be known as the GeoSpace. The release of exhibition space sales will be made in the Second Circular.

**GeoHost Scheme Launch:** At the 34th IGC the GeoHost scheme shall consist of two programs, being the Training Workshop Program (TWP) and the Funded Delegate Program (FDP). There are specific criteria for each program and full details have been provided in the Second Circular. Applications for GeoHost can be made via an on-line process.

**Pre/Post Congress Tours.** A revised list of all pre and post Congress tour offerings, together with descriptions of sites to be visited and duration of each tour, is included in the circular.

### **The Disaster-prone Japanese Archipelago**

In 1853, a U.S. fleet led by Commodore Perry appeared off Uraga. In the following year, Edo Shogunate concluded the Japan-US Treaty of Peace and Amity. Japan was open to the world after more than 200 years of isolation. Westerners landed on the Japanese islands one after another. They were surprised to find that Japan was incredibly prone to natural disasters. In July, 1854, the magnitude-7.6 Ansei Iga Earthquake occurred, claiming 1,800 lives. This, however, was only the prologue to a series of horrifying incidents in the country.

On December 23 in the same year (1854) saw the magnitude-8.4 Ansei Tokai Earthquake, centered in Suruga Bay. On the following day, the magnitude-8.4 Ansei Nankai Earthquake, centered off the Kii Peninsula occurred. The death toll from these two earthquakes was 30,000. In addition, in November the following year (1855), a magnitude-6.9 inland earthquake struck the Tokyo area, causing the loss of more than 10,000 lives through collapsing houses and fires.

In the wake of these three great earthquakes, as many as 3,000 aftershocks were recorded during the next nine years. Foreigners in Japan were daunted by such massive disasters, but, at the same time, they were astonished at the people's ceaseless efforts towards recovery, however serious the damage.

Those involved in disaster prevention around the world have called Japan "a showcase of disasters". This is because four tectonic plates meet near the Japanese archipelago. It is true that Japan has experienced every kind of disaster: earthquakes, tsunami, volcanic eruptions, typhoons, torrential rains, floods, abnormal high tides, heavy snow, lightning, tornadoes, landslides, cold weather, droughts, and famines. There is no type of natural disaster which the Japanese haven't experienced. For example, 20% of the world's major earthquakes and 10% of its volcanic eruptions occur in Japan, even though the Japanese territory accounts for only 0.3% of the earth's total land area.

### **Japan: How Long Will Radiation Continue to Leak?**

People living in fear of leaking, toxic radiation from a disaster that is now on par with the Chernobyl incident

will have to wait until at least June for hopes of stabilization. A new burst of radioactive material was emitted after a failed cooling effort. And engineers recently rejected a proposal that would have tackled the crisis by flooding reactors at Fukushima's damaged plant.

So what are they going to do to combat the issue? No one is 100% certain, as they have announced no timeline for resolution. It may not be an easy task, but it does need a timely solution. But what exactly is going on anyway and why was the flooding option ignored? It's a little complicated actually...

And here's a breakdown of what's going on right now.

**The Bad Part:** -Water levels inside the core of the reactor are dropping. Low-water levels leave fuel rods exposed to open air; allowing them to melt when too hot (it is the water that serves to keep them cool). This combination of a lack of water for cooling with exposed fuel rods permit radiation to be emitted into the pressure vessel.

High temperatures and high pressure are problematic. Unless they are both brought down, dramatically so, workers will be unable to deactivate Fukushima's four damaged reactors. And the fuel rods could melt. In the melting process, the rods are transformed into a molten-hot mass at the bottom of a reactor. No matter what that container is made out of, this molten-mess is so hot that it *will* escape by melting through.

Hundreds of aftershocks have taken place since the March 11th, 9.0 magnitude earthquake. These shocks and quakes have proved tumultuous in their ability to disable the plant's cooling system for extended periods of time. Normally, during power outages that could shut off the cooling system, a generator kicks in. However, even the generator cut-off unexpectedly in a series of surprises contributing to the hindrance of a solution for Fukushima.

Unfortunately, flooding the reactors with water isn't an agreeable solution because it has too many risks; especially in the public eye. With flooding, there would be an unfavorable amount of radiation-tainted-water released into the sea. Not only that, there is also an increased chance that more hydrogen explosions would take place inside the containment (see diagram for reference). Explosions and contamination will never get good publicity.

**Clean up:** The process is projected to take decades and cost up to 1 trillion yen, equivalent to \$12 billion U.S. dollars.

**Now the Good Part:** Japan has support. The United States and France have agreed to step-in; although there has been no comment on the specifics or stipulations quite yet.

As the situation progresses, experts and workers are advancing in their understanding of the issue and are finally getting back to a point where they have control. People living within 12 miles (20 kilometers) were evacuated early in the crisis. Now that the surrounding perimeter is empty and the initial chaos has subsided, workers are focused.

Although radiation is the #1 fear in all of our minds, there is good news found within something called *prophylactic iodine*. Available in pharmacies, this drug aids as a precautionary safety measure. Essentially, it's iodine that individuals would want to take before any exposure to the radioactive iodine. If so, a person's thyroid would already be filled with the non-radioactive iodine (prophylactic), preventing the body's ability to absorb the dangerous radioactive iodine.

**The Uncertain Part:** What's next? Because of recent complications and future possibilities for further unexpected variables, it's difficult to predict. And the media is having difficult time getting information regarding Japan's plan of action.

In Fukushima prefecture, five samples of fishery products; one sample of unprocessed tea leaves; three samples of shiitake mushrooms, nine samples of bamboo shoots; five samples of seafood, and one sample of Japanese apricot, were all above the regulation values for Cesium (Cs)-134/Cs-137. One sample of algae was also above the regulation values for Cs-134/Cs-137 and I-131.

### **Coping with extremes in Pakistan**

Last year the heaviest monsoon rains in 80 years battered Pakistan. Twenty million people were affected and nearly one million homes destroyed, together with four million hectares of crops. The floods obliterated livelihoods and washed away major infrastructure. Today, scientists are still analyzing the weather conditions which caused the flooding. Although this flood was particularly devastating, events like this are becoming more frequent in Pakistan. Moreover, they tend to be coupled with simultaneous drought elsewhere in the country, exacerbating suffering. Since UNESCO's first expert mission travelled to Pakistan in August last year, the Organization has been helping Pakistan to develop an integrated strategy for flood and drought management, together with an overhaul of the country's water policy.

## **ENVIRONMENT**

### **Rio +20 Conference (United Nations Conference on Sustainable Development)**

Rio+20 Conference will be held in June 2012 in Rio de Janeiro, Brazil. The Conference Secretary-General (CSG) Mr. Sha Zukang, has stressed that humanity must urgently rebalance its relationship with natural environment.

"We are witnessing accelerating deterioration of Mother Earth. We must accept that we ourselves are an intrinsic part of nature. By contaminating and depleting Mother Earth, we are also contaminating and depleting ourselves," said Mr. Sha Zukang. Mr. Sha pointed out that this generation must be remembered as the one that left Rio+20 with the consensus to bring civilization back to its roots, in harmony with its source- the Mother Earth.

"You, me, we must all recognize that we are part of Nature and that simply living to fulfill our desires at Nature's expense is not sustainable. We must create a society that is in balance with Nature if we are to survive. We must see ourselves as an inter-connected part of a larger whole," said Ambassador Charles Ntwaagae, Acting President of UNGA.

### **A Fresh Look at Recovering Shale Gas**

Nation by nation, the world is taking a fresh look at the possible risks but also potentially big economic benefits from developing the planet's huge reserves of natural gas that lie in layers of shale, miles deep. The latest country to back unconventional gas development is the United Kingdom, which last week rejected a moratorium on shale gas prospecting in a parliamentary committee report that looked at the impact of the technique on water supplies, energy security, and greenhouse gas emissions.

The study by the Energy and Climate Change Committee at the U.K. Parliament concludes that hydraulic fracturing - the process of injecting water, chemicals, and sand at high pressure into rock formations to free up the oil and natural gas trapped inside - does not pose a direct risk to underground water aquifers, provided the well to be hydraulically fractured is constructed properly. But the committee also acknowledges that while exploiting the shale gas reserves could reduce U.K. reliance on energy imports, it could also divert investment away from renewable technologies like solar, wind, wave or tidal power.

"There has been a lot of hot air recently about the dangers of shale gas drilling, but our inquiry found no evidence to support the main concern—that U.K. water supplies would be put at risk," Tim Yeo, chair of the committee, said in a press release. "There appears to be nothing inherently dangerous about the process of 'fracking' itself, and as long as the integrity of the well is maintained, shale gas extraction should be safe."

The British go-ahead comes just two weeks after the lower house of the French Parliament banned hydraulic fracturing and revoked existing shale gas permits. Meanwhile, South Africa has said it would conduct a feasibility study on fracturing before approving new measures in its semi-desert Karoo region, and China is taking its first steps in shale gas exploration in Sichuan Province.

## COMING EVENTS

**August 1-5, 2011**

**10th International Congress for Applied Mineralogy (ICAM), Trondheim, Norway.** See the website for details, and the 2nd circular at <http://www.icam2011.org/>.

**August 2-10, 2011**

**INHIGEO Symposium 36 – Toyohashi, Japan**

Theme: “Visual Images and Geological Concepts” First circular at: <http://www.inhigeo-jp.org/>

**August 22-26, 2011**

**25th International Applied Geochemistry Symposium (IAGS2011). Rovaniemi, Finland.** Jointly organized by the Geology section of the Finnish Association of Mining and Metallurgical Engineering, the Geological Survey of Finland, the Institute of Geosciences-University of Oulu, the Association of Applied Geochemists (AAG), and with support from professionals in the mineral exploration industry. Deadline for abstracts 31 March 2011. Full details at: <http://www.iags2011.fi/>.

**September 20-25, 2011**

**GEOMED – 4<sup>th</sup> International Conference on Medical Geology, Bari, Italy.** Website: [www.geomed2011.it](http://www.geomed2011.it) E-mail: Prof. Fiore <[chair@geomed2011.it](mailto:chair@geomed2011.it)>

**September 5- 9 2011**

**Annual Conference of the International Associations for Mathematical Geosciences (IAMG).** Theme: bridging theory and practice. IAMG 2011 will be a forum for exchanging mutual ideas on theory and the practical application of a broad spectrum of mathematical geosciences themes. **2011 Salzburg**

**September 14-16, 2011**

**The 17th Meeting of the Association of European Geological Societies (MAEGS-17).** Belgrade, Serbia. Theme “Geology in digital Age”. Website at: <http://www.maegs-17.rs/>

**September 19-23, 2011**

**Geotalia 2011-** Turin, Italy: Theme: Earth Science for Sustainable Development. This year, Geotalia would include a special session on GeoEthics, organized by Dr Silvia Peppoloni, for which about 30 abstracts have already been received. Contact: Website <http://www.geotalia.org> and E-mail: [silvia.peppoloni@ingv.it](mailto:silvia.peppoloni@ingv.it)

**September 23-24, 2011**

**Research Urgencies in the Polar Regions and Their Links to the ICSU Grand Challenges in Global Sustainability.** Siena, Italy. This two day symposium will address all aspects of polar science, with a focus on the functioning of the Earth System in the Arctic and Antarctic, the major drivers of pervasive change and the as yet unaddressed research issues in these regions. These global

issues will be considered in the polar regions within the context of the ICSU Grand Challenges and the research priorities of the Scientific Committee on Antarctic Research (SCAR), the International Arctic Science Committee (IASC), the International Association of Cryospheric Sciences (IACS) and other ICSU Unions and Interdisciplinary Scientific Bodies with interests in polar sciences. See program at: [http://www.mna.it/english/News/ICSU\\_symposium](http://www.mna.it/english/News/ICSU_symposium). Registration by 20 July 2011. For accommodation purposes an expression of interest should be sent by 10 May 2011 (including date of arrival and departure, accommodation needs etc) by email to [muller@unisi.it](mailto:muller@unisi.it)

**October 9-12, 2011**

**Geological Society of America (GSA) Convention 2011, Minneapolis, USA. Theme: Achaean to Anthropocene – the past is the key to the future.** Contact: Ms Pamela Fistell, [pfistell@geosociety.org](mailto:pfistell@geosociety.org). Website <http://www.geosociety.org/meetings/2011/>

**October 11-15, 2011**

**Mining Příbram Symposium, Příbram, Czech Republic.** The long tradition of these international Symposia at Příbram made it possible to open in 1992 – a new series of a specialized international section on Geoethics under guidance from Dr Vaclav Nemeč, for application of ethics in the fields of Earth sciences. AGID’s working group on GeoEthics also meets during the Symposium. Contact: [lidmila.nemcova@quick.cz](mailto:lidmila.nemcova@quick.cz) (convener) and [marcinikova@DIAMO.CZ](mailto:marcinikova@DIAMO.CZ) (secretary).

**November 28-December 2, 2011**

**The second joint international conference of IGCP588 “Preparing for coastal change” and INQUA1001 “Late Quaternary records of coastal evolution.” Bangkok, Thailand.** This conference aims to integrate contemporary processes, impacts and responses of coastal environments to changes in sea level and extreme events, with an overarching focus on human influences and reactions to coastal processes. See updates on the web at: <http://www.coastal-change.org/meetings/upcoming-meetings/2nd-joint-international-conference>.

**December 5-9, 2011**

**AGU Natural Hazards Focus Group. San Francisco, California.** Reminder dates and deadlines: for Session proposals 25 February-20 April 2011; Abstract submissions 8 June-4 August 2011; Nominations for NH Graduate Research Award 15 May, 2011. For details see: [http://www.agu.org/focus\\_group/NH/](http://www.agu.org/focus_group/NH/)

—————2012—————

**June 4-6, 2012**

**United Nations Conference on Sustainable Development (Rio +20). Rio de Janeiro, Brazil.** It is envisaged as a Conference at the highest possible level, including Heads of State and Government or other

# ASSOCIATION OF GEOSCIENTISTS FOR INTERNATIONAL DEVELOPMENT (AGID)

## PAST PRESIDENT'S OFFICE & NEWSLETTER'S OFFICE

**DR. SHRIKANT D. LIMAYE** Director, Ground Water Institute  
2050 Sadashiv Peth, Pune 411030, India. E-mail: [limaye@vsnl.com](mailto:limaye@vsnl.com)

---

**AGID HEADQUARTERS & AGID PRESIDENT: MS AFIA AKHTAR**, Director General, Geological Survey of Bangladesh  
Segunbagicha, Dhaka 1000, Bangladesh. Tel: +88 02 8314810-14, E-mail: [afia@dhaka.agni.com](mailto:afia@dhaka.agni.com)

**OFFICE OF THE PAST PRESIDENT AND EDITOR: DR. SHRIKANT D. LIMAYE**, Director, Ground Water Institute  
2050 Sadashiv Peth, Pune 411030, India. E-mail: [limaye@vsnl.com](mailto:limaye@vsnl.com)

**SECRETARY - TREASURER: DR. A J REEDMAN**. Director (Retd.), British Geological Survey  
15, Malvern Rd, Mapperley, Nottingham, NG3 5GZ UK. E-mail: [antony@areedman.wanadoo.co.uk](mailto:antony@areedman.wanadoo.co.uk)

**AGID VICE PRESIDENTS: DR. A B MACEDO**, Brazil, <[abmacedo@usp.br](mailto:abmacedo@usp.br)>; **DR. SANDRA BARR**, Canada, <[sandra.barr@acadiu.ca](mailto:sandra.barr@acadiu.ca)>;

**PROF. VIQAR HUSAIN**, Pakistan, <[prof.viqarhusain@yahoo.com](mailto:prof.viqarhusain@yahoo.com)>, <[segmite@gmail.com](mailto:segmite@gmail.com)>

**DR. GBENGA OKUNLOLA**, Nigeria, <[gbengaokunlola@yahoo.co.uk](mailto:gbengaokunlola@yahoo.co.uk)>; **DR. VACLAV NEMEC**, Czech Republic, <[lidmila.nemcova@quick.cz](mailto:lidmila.nemcova@quick.cz)>

## APPLICATION FORM FOR INDIVIDUAL MEMBERSHIP OF AGID

*Please Xerox this Form and then fill-in by using Typed or Block Letters Only*

I wish to become an AGID Member and enclose herewith a Demand Draft for U.S. \$ \_\_\_\_\_ / Indian Rupees  
Rs. \_\_\_\_\_, in favour of AGID, towards Membership Dues, For the year 2011 / For Life Membership.

**Please send me my Membership Certificate.**

- Name : Prof. / Dr. / Mr. / Ms. \_\_\_\_\_  
(SURNAME) (OTHER NAMES)
- Address : \_\_\_\_\_  
\_\_\_\_\_
- E-mail : \_\_\_\_\_
- Country of Citizenship : \_\_\_\_\_ 5. Date of Birth : \_\_\_\_\_
- Education (Graduate and Post-Graduate Degrees) : \_\_\_\_\_  
\_\_\_\_\_
- Geoscience topics of my special interest are : (Maximum 3 topics)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date and Place :

Signature

### FOOTNOTE :

- ORDINARY MEMBERSHIP is open to all qualified earth scientist interested in promoting the role of geoscientific resources in development. Qualification shall normally be a first university degree (or its equivalent) in one of the geosciences. ASSOCIATE MEMBERSHIP is open to all other individuals interested in international co-operation for development of low-income countries.
- ANNUAL DUES for Ordinary or Associate Members resident in low income countries are US \$ 3.00. For those resident elsewhere, the dues are US \$ 20.00 per calendar year. **Editor's Office at the address given above, accept a payment of Rs. 150/- by Demand Draft in favour of AGID, payable at Pune.** LIFE MEMBERSHIP is granted to geoscientists in low income countries who make a single payment of Rs. 1,500/- in Indian currency (US \$ 30.00). Those resident elsewhere pay US \$ 200.00.
- All AGID members receive the journal 'Geosciences & Development' and other publications from time to time.

representatives. The Conference will result in a focused political document. More details above. Note that several events are planned in 2011 and 2012 in the run-up to Rio+20. See details on the RIO+20 webpage at: <http://www.uncsd2012.org/rio20/>.

**July 15-22, 2012**

**9th International Symposium on Environmental Geochemistry (ISEG). Aveiro, Portugal.** The ISEG is jointly promoted by the University of Aveiro (Portugal), the International Association of Geochemistry (IAGC), SEGH - Society of Environmental Geochemistry and Health (SEGH) and the International Medical Geology Association (IMGA). From 30 April 2011 the ISEG website will be available at: <http://9iseg.web.ua.pt>. Email contact: [geo-9iseg@ua.pt](mailto:geo-9iseg@ua.pt).

**August 5-10, 2012**

**34th International Geological Congress (IGC) in Brisbane, Australia.** Second Circular has been posted on-line at: [www.34igc.org/](http://www.34igc.org/)

**August 26-30, 2012**

**The "32nd International Geographical Congress" in Cologne, Germany.** Theme "Down to Earth". Geographers bring the wide-ranging perspectives and methodology of their subject to bear on four major thematic complexes - bringing research down to earth: Global Change and Globalisation; Society and Environment; Risks and Conflicts; Urbanisation and

Demographic Change. For details see: <http://www.igc2012.org/>

**November 15-17, 2012**

**4<sup>th</sup> International Conference on Science in Society, Berkley, California.** Website: <http://science-society.com/conference-2012/> **Contact name:** Audrey LeGrande

**December 2012**

**International Ground Water Congress : Aurangabad, India.** Contact : Prof Kulkarni <[psk120154@yahoo.co.in](mailto:psk120154@yahoo.co.in)> or Dr. S.D. Limaye <[limaye@vsnl.com](mailto:limaye@vsnl.com)>

—————**2013**—————

**July 22-28, 2013**

**INHIGEO** Manchester, United Kingdo The 24th International Congress on the History of Science, Technology and Medicine. [www.inhigeo.org](http://www.inhigeo.org)

**September 2013**

**9th international symposium on the Cretaceous System.**

**Middle East Technical University (METU), Ankara, Turkey.** The official language of the annual meeting will be English. Final dates to be announced. Keep up to date with developments at: <http://www.cretaceous2013.org/en/> For enquiries contact Assoc. Prof. Dr. Ismail Omer YILMAZ. Email: [iyilmaz@metu.edu.tr](mailto:iyilmaz@metu.edu.tr)

**AGID'S GEOSCIENCE NEWSLETTER IS PUBLISHED  
FOR FREE DISSEMINATION OF GEOSCIENTIFIC INFORMATION**

**CO-SPONSORED BY UNESCO - NEWSLETTER ISSUE NO. 60 (DECEMBER 2010)**

**BOOK-POST - PERIODICAL - AIR MAIL**

**FREE DISTRIBUTION OF EDUCATIONAL PRINTED MATTER**

**TO**

*If undelivered, please return to :*  
**DR. S.D. LIMAYE, HON. EDITOR, AGID NEWSLETTER  
AND PAST PRESIDENT, AGID  
2050 SADASHIV PETH, POONA 411 030 (INDIA)**