OUR SPONSORS

EnCana

OXY

Novus

Schlumberger
PRESIDENT'S ADDRESS

Farewell!

The past year (2003-2004) marked another significant year in the life of our young Society. We managed to attract 41 new members to increase our total membership body to 292. We have also been able to execute a record number of regular activities. A total of 11 talks and five fieldtrips were delivered as part of last year’s programme. And in January 2004, we launched al Hajar, GSO’s quarterly newsletter.

At the regional scale, GSO was represented in the Organizing Committee of the GEO 2004 conference. The Society also contributed to the conference activity programme by offering a fieldtrip and a workshop. At the international level, the Society sponsored the EAGE/SEG distinguished instructor short course. The Society is also on the Organizing Committee of the 24th IAS meeting of sedimentology, that will be held here in Muscat in early 2005.

Financially, both Petroleum Development Oman (Exploration Directorate) and Occidental of Oman provided sponsorship. GSO is greatly indebted to both organizations for their annual contributions over the past three years. We also appreciate the sponsorship provided by Oman LNG and Encama this year. Income was also raised, for the first time, from advertising fees in al Hajar and other GSO activities. We are, however, still struggling to increase the financial contribution from our membership body to acceptable levels. Half of GSO members did not pay their dues last year!

All in all, this has been a great year! The closing of this year also marks the end of my term as the President of GSO, which started in 2001. Over the past three years, I was fortunate to have had the opportunity to meet most of you either during monthly talks, society fieldtrips or annual meetings. I would like therefore to take this opportunity to thank those of you who have made my involvement with GSO memorable and successful. I also would like to wish the next Executive Committee the best of luck. The continued success of this organization is dependent on your support.

Best Regards,
Dr. Hisham A. Al-Siyabi
GSO President
NEW EXECUTIVE COMMITTEE’S ADDRESS

Dr. Omar Salim Al-Ja’a’idi
Representative of the New Executive Committee

On behalf of GSO’s New Executive Committee

History is not just a matter of dates. What makes history is what comes before and what comes after the dates we all remember. The story of the GSO is about the three years before this night, and the years of success that will surely follow it.

What we celebrate today is the restless energy, the hard work and the audacity of the men and women who have successfully begun in writing GSO’s success story. They were only ordinary in the sense that most of them were equipped only with a vision, motivation and hope. They are extraordinary in what they have achieved against the odds. The values they hold are universal values. Remember, that the role of an executive committee member is purely voluntary.

Tonight’s celebration is also tinged for some with sadness. So from the new executive committee and on behalf of all the GSO members, we would like to thank the President of the GSO and his Committee for their dedication and hard work. We have no doubt that the new executive committee; together with your help will continue to add success to GSO’s never ending story. To date the Geological society of Oman has with flying colors succeeded in achieving its main goals. It has been able to assert itself as a professional organization both locally and regionally. The Geological Society of Oman will continue to play a major role together with other organizations associated with our science. GSO will participate through its numerous activities in identifying and disseminating the most compelling and exciting research questions in geosciences and then when able provide the support that this group needs to prosper. Ultimately, curiosity driven research is the underpinning of a knowledge economy. However, the time has come where the society strongly believes that it can participate in other important arenas that are important to the Sultanate. One of these essential areas includes the Geo-tourism Industry and the gradual growth it has experienced in the last few years. Here the GSO can lend its expertise to the concerned ministries to adequately promote geo-tourism in the Sultanate as well as consult to various regional and international geo-tourism companies.

The other important area which is close to our hearts is Geological Conservation. As we are all aware that Oman’s geology records the history of hundreds of millions of years during which time our planet took shape. Oman’s coastline, majestic mountains, caves, and numerous wadis provide windows through which to study our geological history. The rocks, fossils and various minerals exposed illustrate how continents have drifted, how climates and sea-levels have changed, how volcanoes have erupted, and how natural processes such as erosion have shaped, and continue to shape, the landscape. Most importantly, we have a record of over 600 million years of geological heritage, reminding us that life on Earth today is just a snap-shot in the development of life on Earth. Unfortunately our rich geological heritage if not conserved will eventually be eroded with time not only by natural processes but by the naivety of us.

In its pro-activeness the GSO will in the coming months launch a campaign entitled “The past is the key to the future” in the hope of promoting awareness on the numerous unrivalled geological sites to the geosciences community and the public as a whole. Your society, together with other sister societies (Environmental Society of Oman, The Historical Society, and SQU’s Geogroup) hope to work with the Ministry of Heritage and Culture to identify important geological sites that are at risk of destruction. The GSO also believes that a stand alone geological museum housing several geological samples can only serve the promotion of geological awareness to the youth of the Sultanate, act as an attraction for tourists and safe heaven for irreplaceable geological specimens.

From this stand point, the GSO will form three committees to draw up strategic plans for promoting Geo-tourism in Oman and for advocating Geological Conservation and for the construction of a Geological Museum. Here the new executive committee would like to invite the participation of its members.

Finally, the GSO received a number of sponsor’s donations last year, and I would like to take this opportunity to thank all those who so generously supported the Society. However I would also like to urge our generous sponsors to lend your continuous support to this ever growing geoscience society. Among other activities, your generous support will allow the GSO to make available funds to support young outstanding geologists in activities such as conference travel or research. In the last twelve months, we have lost a number of members, but we have also accrued new ones, so that the total membership now stands at about 292. A large number of students and young professionals have taken up membership in the GSO, which is important for the future of our society. I would like to urge all members as well as lecturers in the universities and managers in companies, to promote the Society to students and young geologists in industry, to emphasize to them the important work that the GSO does in promoting their profession and their professional standing.

My fellow members, guests and colleagues, when writing this to you, I felt that we had laid down an ambitious vision but suddenly realised that the accomplishments of this committee and the GSO members will only just be another chapter of the never ending success story of our geological society “The GEOLOGICAL SOCIETY OF OMAN”
ExCom 2002-2004

Dr. Hisham Al Siyabi

Dr. Omar S. Al Ja’aidi

Dr. Khalil Al Riyami

Dr. Jan Schreurs

Mr. Talib Al Ajmi

Mr. Ibrahim Al Zadjali

Mr. Zahir Al Musalami

Mr. Mohamed Al Harthy
ExCom 2004-2006

Dr. Omar S. Al Ja’a’idi

Dr. Bader Al Barwani

Dr. Nadia Al Abry

Mr. John Willoughby

Mr. Harub Al Hinai

Dr. Mohammed Al Mazrui

Mr. Talal Al Musallami

Mr. Adil Al Kiyumi
Since April 2001, GSO has steadily grown in size with a total of 292 members attracted to join the society till May 2004. The enrolling members represent a spectrum of geoscientists from a wide and diverse background and affiliations (Figure 1). The majority (41%) of the GSO members are from the oil industry while the rest are divided into 26% SQU, 16% Government and 17% from different organisations and affiliations. The Government sector is represented by various ministries such as the Ministry of Oil & Gas, Ministry of Regional municipality, Environment & Water Resources and the Ministry of Commerce & Industry—The Directorate General of Minerals.

The current break down of the membership categories is as follows: 52% of the members qualified for active membership, while 16% joined as associates (Figure 2). 27% of the new members are of the student category (who enjoyed a free membership to the society), while the remaining 4% represents the junior and 1% the honorary. The executive committee would like to thank all its members who paid their membership dues for 2003/2004.

GSO has also awarded three honorary memberships since its inception. These awards were given in recognition to the individuals contributions in advancing geoscience internationally and enriching our knowledge of Oman’s Geology. Our honorary members are:

- Professor Farouk ElBaz (Boston University), awarded in 2001.
- Professor John Grotzinger (Massachusetts Institute of Technology), awarded in 2001.
- Professor Kenneth Glennie (University of Aberdeen), awarded 2002.
## GSO BUDGET 2003-2004

### EXPENDITURE DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>OMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Talks</td>
<td>2,427.700</td>
</tr>
<tr>
<td>Field Trips</td>
<td>2,558.920</td>
</tr>
<tr>
<td>Awards</td>
<td>263.500</td>
</tr>
<tr>
<td>Annual Report</td>
<td>650.000</td>
</tr>
<tr>
<td>Photography</td>
<td>30.000</td>
</tr>
<tr>
<td>Membership Cards</td>
<td>199.20</td>
</tr>
<tr>
<td>GeoArabia</td>
<td></td>
</tr>
<tr>
<td>Organizing Committee Meeting</td>
<td>1,128.080</td>
</tr>
<tr>
<td>Shuaiba Workshop</td>
<td>3,071.100</td>
</tr>
<tr>
<td>Publications</td>
<td></td>
</tr>
<tr>
<td>Al Hajar Newsletters</td>
<td>1,068.000</td>
</tr>
<tr>
<td>Web Services</td>
<td></td>
</tr>
<tr>
<td>Web Maintenance</td>
<td>760.000</td>
</tr>
<tr>
<td>Web Rental Charges</td>
<td>375.000</td>
</tr>
<tr>
<td>Sponsorship</td>
<td></td>
</tr>
<tr>
<td>SQU GeoGroup</td>
<td>259.800</td>
</tr>
<tr>
<td>Other Expenditure</td>
<td></td>
</tr>
<tr>
<td>Postal Charges</td>
<td>18.000</td>
</tr>
<tr>
<td>Stationaries</td>
<td>73.000</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td><strong>12,882.290</strong></td>
</tr>
</tbody>
</table>

### REVENUE DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>OMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership Fees</td>
<td>1500.000</td>
</tr>
<tr>
<td>Sponsorships</td>
<td></td>
</tr>
<tr>
<td>Encana</td>
<td>300.000</td>
</tr>
<tr>
<td>Occidental Oman</td>
<td>1,800.000</td>
</tr>
<tr>
<td>Petroleum Development Oman</td>
<td>7,570.540</td>
</tr>
<tr>
<td>GeoArabia</td>
<td></td>
</tr>
<tr>
<td>Shuaiba Carbonate Workshop</td>
<td>3,544.750</td>
</tr>
<tr>
<td>Book Sales</td>
<td>160.000</td>
</tr>
<tr>
<td>Field Trips</td>
<td>1,149.500</td>
</tr>
<tr>
<td>Advertisements (Al Hajar Newsletter)</td>
<td>650.000</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>16,674.790</strong></td>
</tr>
</tbody>
</table>
MONTHLY TALKS 2003-2004

2003

23rd September
Pn Tomographic Imaging of Mantle Lid Velocity and Anisotropy at the Junction of Arabian, Eurasian, and African Plates
Dr. Ali Al Lazki
Sultan Qaboos University

4th October
The influence of sea level and global climate cycles on carbonate porosity evolution
Dr. Clyde Moore
Colorado School of Mines, USA

7th December
Exploration and production in aeolian systems: Possibilities in Oman
Steven G. Fryberger
Petroleum Development Oman

2004

6th January
“Neoproterozoic Snowball Earth: Testing the Limits of Global Change”
Dr. Paul Hoffman
Harvard University USA

20th January
“Neoproterozoic Glaciations in Oman”.
Dr. Phillip Allen
Department of Earth Sciences at ETH Zurich, Switzerland

24th February
A GSO-SPE Joint Talk
“Salt Tectonics: A Regional Prospective”
Dr. Bader Al Barwani
Petroleum Development Oman

6th March
“Geometry, poroperm and sequence stratigraphy of ‘shoal’ geobodies: outcrop analogs for Middle East carbonate reservoirs”
Dr. Thomas Aigner
University of Tuebingen
Germany

27th April
“The Study of Kuwait’s Oil lakes and Oil-Polluted Surfaces Using Remote Sensing”
Dr. Andy Y Kwarteng
Sultan Qaboos University

4th May
“Ghawar: Anatomy of the World’s Largest Oil Field”
Dr. Abdulkader M. Afifi
Saudi Aramco

18th May
“End Permian extinction and the fungal spike”
Dr. Michael Stephenson
British Geological Survey
United Kingdom.

1st June
“LNG Business in Oman”
Dr. Agnus Cassens
Oman LNG
GEOLOGICAL FIELD TRIPS

2003

16-17 October 2003
Geological Excursion to Wadi Jizzi
Dr. Jan Schreurs
Petroleum Development Oman L.L.C.

11 December 2003
Geological Excursion in the Muscat Area
Ladies Only!
Dr. Mia VanSteenwinkel
Petroleum Development Oman L.L.C.

2004

08 January 2004
From Snowball Earth to Hothouse - A Journey into Oman’s Distant Past
Dr. Joachim Amthor
Petroleum Development Oman L.L.C.

2-5 March 2004
Geo’2004 field trip Early-Late Permian Gharif Deposits in Oman at outcrop and in core
Dr. Alan Heward, Petroleum Development Oman L.L.C. &
Dr. Omar Al Ja’aidi, Sultan Qaboos University

21–23 April 2004
Permian-NeoProteroic rocks of the Southern Huqf
Dr. Alan Heward
Petroleum Development Oman L.L.C.
INTERNATIONAL AND LOCAL PARTICIPATION/CO-OPERATION

GEO 2004
The Society participated in the 6th Middle East Geoscience Conference (GEO2004), which was held in Bahrain from the 7th to the 10th of March 2004. GSO was represented in the Organising Committee of the conference, which consisted of a wide range of associations such as national and international oil companies, service industries, and regional geoscience societies. In addition, the Society contributed to the conference activity programme by sponsoring a pre conference field trip to the Gharif outcrops and a post conference core workshop on the Shuiaba Formation.

The Society sponsored a fieldtrip to al Khalta and Gharif outcrops in the Huqf Area which took place between the 2nd - 5th of March. Participants spent the last day of the trip at PDO’s core shed facilities examining Gharif and Al Khlata cores from nearby producing fields. The trip was led by Dr. Alan Heward and Dr. Omar Al Ja‘aidi.

GSO also participated in the conference exhibit which included exhibitors from 94 companies and institutions representing 17 countries. At the Society’s booth, al Hajar special publication was distributed to visitors who included a number of representatives of regional geoscience organisations and people interested in the geology of Oman.

The Society also sponsored a very successful post conference Shuaiba core workshop, which took place from the 10th to the 11th of March. The workshop was attended by more than 50 participants, who examined a total of 500 meters of Shuaiba core from six different producing fields in the Gulf region. The course was organised by Dr. Volker Vahrenkamp and Ms. Alia Al-Bahry.

European Association of Engineers and Geoscientist
During the Month of October 2003, the Society sponsored running the 2003 SEG/EAGE distinguished instructor short course here in Oman. The SEG/EAGE course, which was titled “Geo statistics for seismic data integration in earth models”, was given by Dr. Olivier Dubrule. The course was held on the 18th of October and was attended by 40 participants including students from the Sultan Qaboos University.

American Association of Petroleum Geologists (AAPG)
Continuing with its annual tradition, GSO extended an invitation to the AAPG distinguished lecturer, Dr. Abdulkader Affi, to visit the Sultanate and deliver a talk to GSO members in May of 2004. Dr. Affi who works at Saudi Aramco delivered a talk titled “Ghawar: Anatomy of the world’s largest oil field”.

International Association of Sedimentologists (IAS)
The Society’s in conjunction with the Virtual Reality Centre for Carbonate Studies and the Earth Science Department at Sultan Qaboos University is involved in the organizing of 24th IAS meeting of sedimentology planned to take place in Muscat between the 10-13th of January 2005.

Society of Petroleum Engineers (SPE)- Oman Chapter
The Society held its joint annual talk with Oman’s chapter of the SPE on the 24th of February 2004. The speaker for the event was Dr. Bader Al Barwani and the title of his talk was “Salt tectonics: a regional perspective”.

GEO Group at Sultan Qaboos University
GSO provided its annual sponsorship to the GEO Group which was used this year to fund science projects presented at the Science festival held at the College of Science on the 27th of April 2004. The Aeolian ripple marks simulator, one of the projects presented by the Group, won the first prize.
Al Hajar, GSO’s quarterly newsletter launched in January 2004 is a success and GSO aims at establishing Al Hajar as a leading geoscience newsletter in Oman and Internationally. The newsletter is planned to be crisp and light but still informative with a cutting edge. Al Hajar incorporates technical, business and leisure geoscience topics which may include:

- Geological sites from Oman and/or around the world.
- Profile of person or geological institute, centre etc…
- Review of geological publications (articles, books etc...).
- Reviews on GSO activities: Monthly talks topics and field trips.
- List of the latest publications on Oman geology (and maybe a review on one of them once a while).
- Latest news from GSO’s principal sponsors, exploration and/or production: business, technical & academic.
- Latest news from the different contractors and operators.
- Youngsters corner: Review and explanation of the Oman stratigraphy, geology concepts only explained simply.
- Calendar and/or events list of the GSO (talks and fieldtrips) and other affiliated institutes such as SQU, EAGE, AAPG….

The first two issues covered some very interesting topics particularly with the 2nd issue being a special publication of GeoArabia 2004. The topics covered in the 2nd issue included Exploration Opportunities in Oman: Hydrocarbons & Minerals, Ministry of Oil and Gas complemented by one of the operating companies (Encana) view. Scientific articles of Earthquakes and the P-C boundary in Oman, GSO activities reviews and a profile of the father of Oman geology “Ken Glenni”.

Our vision is to become one of the premier geological societies in the region by actively sharing Oman’s unique and diverse geological heritage with the rest of the scientific community. The launch of Al-Hajar has been received with much enthusiasm and support from the GSO members and other various parties and we are looking forward to establishing the newsletter as a platform of leading geoscience news and knowledge in Oman and internationally.
GSO AWARDS

GSO Outstanding Service Award

This award is presented to individuals that have dedicated the time and effort in devising and executing GSO strategy over the past two years and who have helped significantly in making GSO meet its objectives.

- Mr. Mohamed Al Harthy
- Dr. Omar Al Ja’aidi
- Mr. Talib Al Ajmi

GSO Service Award

This award is presented to individuals who have helped in significant ways in making GSO meet its objectives in the past two years.

- Dr. Khalil Al Riyami
- Dr. Alan Heward
- Dr. Joachim Amthor
- Mr. Zahir Al Musallami
- Dr. Nadia Al Abry
- Mr. John Willoughby
- Dr. Abdulrahman Al Harthy

GSO Certificate of Appreciation

This award is presented to individuals who have helped in the execution of various GSO activities.

- Mr. Ibrahim Al Zadjali (Society Secretary 2002-2004)
- Dr. Jan Schreurs (Society Editor 2002-2004)
- Dr. Volker Vahrenkamp (Organiser of Shuaiba Core workshop)
- Ms. Alia Al Bahry (Organiser of Shuaiba Core workshop)
- Mr. Abdulhalim Abdissalaam (Contributor to Shuaiba Core workshop)
- Mr. Suleiman Al Zakwani (Helped with GSO booth at Geo2004)
- Mr. Adil Al Kiyumi (Helped with GSO booth at Geo2004)
- Mr. Yaqoob Al Saadi (Helped with GSO booth at Geo2004)
- Ms. Khairan Al Mauly (Helped with GSO booth at Geo2004)
- Ms. Safia Al Mazrui (Helped with GSO booth at Geo2004)
- Mr. Ahmed Al Harthy (Helped with GSO booth at Geo2004)
- Mr. Saleh Al Anboori (Member of Committee of Al Hajar)
- Mr. Bader Al Kalbani (Member of Editorial Committee of Al Hajar)
- Dr. Ali Lazki (Member of Editorial Committee of Al Hajar)
- Mr. Sombhat Chalyathed (Member of Editorial Committee of Al Hajar)
- Mr. Glen W. Mah (Member of Editorial Committee of Al Hajar)
- Mr. Ahmed Al Malki (Contributed to GSO Public Exhibit, November 2002)
- Mr. Hamad Al-Jabri (Contributed to GSO Public Exhibit, November 2002)
- Mr. Abdullah Al-Alawi (Contributed to GSO public Exhibit, November 2002)
- Mr. Salim Al-Marjibi (Contributed to GSO public Exhibit, November 2002)
- Mr. Issa Al-Mahroqi (Contributed to GSO public Exhibit, November 2002)
<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Event Details</th>
</tr>
</thead>
</table>
| 2004 | September | 1st GSO talk  
“Exploration Opportunities in Oman”  
Mr. Hussain Al-Lawati  
Ministry of Oil & Gas |
| | | 2nd GSO talk  
“Upper Cretaceous tectonics of North Oman”  
Dr. Jean Paul Breton  
BRGM |
| | October | 1st GSO Field trip  
“Tectonics of the Jebel Akhdar”  
Dr. Jean Paul Breton  
BRGM |
| | | 3rd GSO talk  
“The Ara equivalent in Siberia”  
Dr. Shane Pelechaty Petroleum Development Oman |
| | | 2nd GSO Field trip  
“The Saiq Plato”  
Dr. Gordon Coy Badley Ashton |
| | November | 4th GSO talk  
“Mars Exploration”  
Dr. John Grotzinger  
Massachusetts Institute of Technology |
| | December | 5th GSO talk  
“Carbonate facies through Oman’s geological history”  
Mr. Mohamed Al-Harthy  
Petroleum Development Oman |
| | | 3rd GSO Field trip  
“Geology of the Ordovician Amdai Formation”  
Dr. John Aitken Badley Ashton |
| 2005 | January | 6th GSO talk  
Dr. Salah Khirbash  
Sultan Qaboos University |
| | February | 7th GSO talk  
“Fluid characterization using 4D seismic amplitude and coherence analysis”  
Dr. Mohammed Al-Mazrui Petroleum Development Oman |
| | | 4th GSO Field trip  
“Salt domes in North Oman”  
Dr. Hisham Al-Siyabi & Dr. Mark Newell Petroleum Development Oman |
| | March | 8th GSO talk  
“Exploration History in Oman”  
Dr. Alan Heward Petroleum Development Oman |
| | | 5th GSO Field trip  
“Geology of the Saiwan Area, Northern Huqf”  
Dr. Alan Heward Petroleum Development Oman |
| | April | 9th GSO talk  
“General aspects of the main structural units in the northern part of the Arabian plate (Syria)”  
Dr. AbdulNasser Darkal Sultan Qaboos University |
| | | 6th GSO Field trip  
“The Seeb Formation & Palaeogene succession of the Al-Khod area.”  
Dr. Abdulrahman Al-Harthy Sultan Qaboos University |
| | May | 10th GSO talk  
A GSO-SPE Joint Talk |