The Arabian Geosciences Union (ArabGU)
The African Association of Women in Geosciences (AAWG)
The African Geoparks Network (AGN)

in partnership with the

"Geodynamics, Geo-education and Geoheritage Research Group"
Faculty of Sciences, Chouaïb Doukkali University, El Jadida, Morocco

Organize a joint Congress under the title

"Earth Sciences for Society"
El Jadida/Marrakech, Morocco, 20-24 March 2018

FIRST CIRCULAR
PREAMBLE

The "Geodynamics, Geo-education and Geoheritage Research Group" of the Geology Department, Faculty of Sciences, El Jadida (Morocco) in collaboration with the Arabian Geosciences Union (ArabGU), the African Association of Women in Geosciences (AAWG) and the African Geoparks Network (AGN) organize a jointly the 2\textsuperscript{nd} ArabGU International Conference (AIC2), the 9\textsuperscript{th} AAWG Conference (CAAWG9) and the 3\textsuperscript{rd} International Conference on Geoparks in Africa and Middle-East (ICGAME3). This joint congress is hosted by the Faculty of Sciences, Chouaib Doukkali University, El Jadida (Morocco).

The AAWG, the ArabGU and the AGN are supporting the development of Earth Sciences in Africa and Middle-East by providing opportunities for networking and promoting the applications of Earth Sciences for sustainable development. These organizations are conducting numerous activities to address various challenges that Africa and Middle-East are facing and to which Earth Sciences could make a contribution. In order to strengthen the collaboration between African and Middle-East, this joint congress is being organized for the first time in Morocco. To meet these objectives, we choose as a title for our joint congress "Earth Sciences for Society".

This congress constitutes an opportunity to launch officially the "Day of Earth Sciences in Africa and Middle-East (DESAME)" initiated and organized by AAWG and AGN the 20\textsuperscript{th} March of each year. The day aims to increase the awareness about the role that Earth Scientists could play to help to build a peaceful, healthier and wealthier continent. First celebrated in 2013, the DESAME is at its 6\textsuperscript{th} edition that will be celebrated this year under the same theme of the congress. The DESAME is supported by the ArabGU, GSAf, IAPG, IAGETH, SAES, YES Network, CIFEG, GIRAF and many national organizations, institutions and local governments.

CONGRESS CHAIRS
ENNIH Nasser (Morocco)
HAMIMI Zakaria (Co-chair, Egypt)

ORGANIZING COMMITTEE

**Congress/ Official launch of the “Day of Earth Sciences in Africa and Middle-East”**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENNIH Nasser</td>
<td>Morocco</td>
</tr>
<tr>
<td>EL ACHHEB Abderrahim</td>
<td>Morocco</td>
</tr>
<tr>
<td>ETTACHFINI El Mostafa</td>
<td>Morocco</td>
</tr>
<tr>
<td>TOUFIQ Abdelkarib</td>
<td>Morocco</td>
</tr>
<tr>
<td>DRIOUCH Youssef</td>
<td>Morocco</td>
</tr>
<tr>
<td>BOBROWSKY Peter</td>
<td>Canada</td>
</tr>
<tr>
<td>OUAIJAIN Brahim</td>
<td>Morocco</td>
</tr>
<tr>
<td>AYADI Soumaya</td>
<td>Lebanon</td>
</tr>
<tr>
<td>BARICH Amel</td>
<td>Morocco</td>
</tr>
<tr>
<td>EL BCHARI Fatima</td>
<td>Morocco</td>
</tr>
<tr>
<td>GAULY Marcelle</td>
<td>Cote d'Ivoire</td>
</tr>
<tr>
<td>NABAWY Bassem</td>
<td>Egypt</td>
</tr>
<tr>
<td>POOPOLA Funke</td>
<td>Nigeria</td>
</tr>
<tr>
<td>SEGHEDI Antoneta</td>
<td>Romania</td>
</tr>
<tr>
<td>SIBY Sophie</td>
<td>Senegal</td>
</tr>
<tr>
<td>TEA Juliette</td>
<td>Cote d'Ivoire</td>
</tr>
<tr>
<td>DAAFI Youssef</td>
<td>Morocco</td>
</tr>
<tr>
<td>KETCHEMEN Béatrice</td>
<td>Cameroon</td>
</tr>
<tr>
<td>BENISMAIL Kmar</td>
<td>Tunisia</td>
</tr>
<tr>
<td>AHMED Aisha</td>
<td>Nigeria</td>
</tr>
<tr>
<td>SALISU Lawal</td>
<td>Nigeria</td>
</tr>
<tr>
<td>HASSINE Mohsine</td>
<td>Tunisia</td>
</tr>
<tr>
<td>ICAME Nouriissaid</td>
<td>Morocco</td>
</tr>
<tr>
<td>IKWUMELEZEH Arinze</td>
<td>Nigeria</td>
</tr>
<tr>
<td>BOURGEINOI Yamina</td>
<td>Morocco</td>
</tr>
<tr>
<td>YAO N'GORAN Jean-Paul</td>
<td>Cote d'Ivoire</td>
</tr>
<tr>
<td>ZANGMO Ghislain</td>
<td>Cameroon</td>
</tr>
<tr>
<td>AIT MALEK Halima</td>
<td>Morocco</td>
</tr>
<tr>
<td>AASILA Hind</td>
<td>Morocco</td>
</tr>
<tr>
<td>BALOUKI Soumia</td>
<td>Morocco</td>
</tr>
<tr>
<td>BENCHEKROUN Fouad</td>
<td>Morocco</td>
</tr>
<tr>
<td>KHATMI Samira</td>
<td>Morocco</td>
</tr>
<tr>
<td>EL HACHIMI Hind</td>
<td>Morocco</td>
</tr>
</tbody>
</table>

**PhD & Master Students**

The list of active students will appear in the third circular

THEMES OF THE JOINT CONFERENCE
GEOSCIENCES FOR SOCIETY

Theme 1 - Geoheritage, Geoconservation, Geotourism and Geoparks
Convenors: Errami Ezzoura (Morocco), Brilha José (Portugal), Andrasanu Alexandru (Romania), Dacosta Pauline (Togo), Fadli Driss (Morocco), Moufti Mohammed Rashad (Saudia Arabia), Amrikazemi Alireza (Iran), Allan Mamoon (Jordan), Asrat Asfawossen (Ethiopia), Pereira Lola (Spain).

Theme 2 - Earth Sciences Education and Public Communication
Convenors: Errami Ezzoura (Morocco), Toteu Félix (Nairobi), Seghedi Antoneta (Romania), King Chris (UK).

Theme 3 - Water resources
Convenors: Ketchemen Béatrice (Cameroon), Oga Solange (Cote d'Ivoire), El Achheb Abderrahim (Morocco), Al Bassam Abdelaziz (Saudia Arabia), Cherkaoui Dekkaki Hind (Morocco), El Amrani Namira (Morocco), Saad Aisha (Morocco), Limaye Shrikant (India), Hassan Fekri (Egypt).

Theme 4 - Evolution of the Biosphere, Soil Science & Biogeoscience
Convenors: Badraoui Mohamed (Morocco), Marlin Christelle (France), Madani Gamal Gomaah (Egypt), Aajjane Ahmed (Morocco), Saber Najib (Morocco).

Theme 5 - Geohazards
Convenors: Bobrowsky Peter (Canada), Tamesgen Assefa (Ethiopia), Boumaggarde El Hassan (Morocco), El Bchari Fatima (Morocco), Rouai Mohamed (Morocco).

Theme 6 - Remote Sensing Technologies and Data and Information Systems
Convenors: Kufoniyi Jide (Nigeria), Woldai Tsehaie (South Africa), Qari Mohammed (Saudia Arabia), Labbassi Kamal (Morocco), Hassan Safaa (Egypt), Fekkak Abdelilah (Morocco), Djemai Safouane (Algeria), Rahimi Abdelmajid (Morocco).

Theme 7 - Geosciences History
Convenors: El Ghalbi Khallaf (Morocco), Errami Ezzoura (Morocco).

Theme 8 - Medical Geology
Convenors: Tete-Benissan Amivi (Togo), Omulo Monica (Kenya), Davies Theo (Nigeria).

Theme 9 - Geothics
Convenors: Bobrowsky Peter (Canada), Errami Ezzoura (Morocco), Peppolini Silvia (Italy), Hamimi Zakaria (Egypt).

Theme 10 - Environmental Geosciences
Convenors: Gathuru Gladys (Kenya), Meck Lydia (Zimbabwe), Hakkou Rachid (Morocco), Shendi El-Arabi Hendi (Egypt), Uriah Alexander Lar (Nigeria), Dekayir Abdelilah (Morocco).

Theme 11 - Climate Change and adaptability
Convenors: Omulo Monica (Kenya), Sinan Mohamed (Morocco), Benabidate Lahcen (Morocco), Salisu Lawal (Nigeria).

Theme 12 - Engineering Geology and Geomechanics
Convenors: Tshibangu Jean-Pierre (Belgium), Andrianaivo Lala (Madagascar), Di Capua Giuseppe (Italy).

Theme 13 - Women and Geosciences
**Convenors:** Errami Ezzoura (Morocco), Omulo Monica (Kenya), Tea Juliette (Cote d'Ivoire), Siby Sophie (Senegal), Hassan Farkhonda (Egypt), Hadj Zobir Soraya (Algeria), Akhtar Afia (Bangladesh), Trajanova Mirka (Slovenia).

**Theme 14 - Geosciences diplomacy**
**Convenors:** Burkins Melody B. (USA), Errami Ezzoura (Morocco), Zaki Abdel Aziz (Egypt).

**GEOSCIENCES IN THE ECONOMY**

**Theme 15 - Mineral Resources and Mining Engineering**
**Convenors:** Mouttaqi Abdellah (Morocco), Mâacha Lhou (Morocco), Nguno Anna (Namibia), Amel Rajeb (Morocco), Zoheir Basem (Egypt), Dos Santos Esperanca (Angola), Ancía Philippe (Belgium), Vasconcelos Lopo (Mozambique), Al Ansari Abdelkhalek (Morocco), Kimiya Sadat Ajayebi (Iran), Belkasmi Mohammed (Morocco), Berrada Samia (Morocco), Jouhari Abdellatif (Morocco), Okunlola Gbenga (Nigeria).

**Theme 16 - Petroleum Systems and Geoenergetic resources**
**Convenors:** Darsi Nedham Mohammed (Yemen), Gauly Marcele (Cote d'Ivoire), Tea Juliette (Cote d'Ivoire), Hafid Mohamed (Morocco), Maculuve E. Inocencia (Mozambique), Nair de Sousa (Angola).

**Theme 17 - Geostatistics and Mathematical Geosciences**
**Convenors:** Khawasik Samir (Egypt), El Mansouri Bouabid (Morocco), Jourani Essaïd (Morocco).

**Theme 18 - Gemology**
**Convenors:** El Araky Fahmy (Egypt), El Harfi Abdelghani (Morocco).

**FUNDAMENTAL GEOSCIENCES**

**Theme 19 - Precambrian Earth**
**Convenors:** Ennih Nasser (Morocco), Jayananda Muslappa (India), Ikenne Moha (Morocco), Youbi Nassreddie (Morocco), Liégeois Jean Paul (Belgium), Khalidou Lo (Mauritania).

**Theme 20 - Phanerozoic Earth**
**Convenors:** Tahiri Abdelfettah (Morocco), Saddiqi Omar (Morocco), Maate Ali (Morocco), Ouanaaimi Hassan (Morocco), Lakhloufi Abdallah (Morocco), Michard André (France).

**Theme 21 - Geochronology and Isotope Geosciences**
**Convenors:** Linnemann Ulf (Germany), Abati Jacobo (Spain), Bouchaou Lahoussaine (Morocco).

**Theme 22 - Magmatic Processes and Volcanology**
**Convenors:** Bendaoud Abderrahman (Algeria), El Nadi Abdelhalim (Sudan), Diot Hervé (France), Berger Julien (France), Driouch Youssef (Morocco), El Hadi Hassan (Morocco).

**Theme 23 - Geochemistry and Mineralogy**
**Convenors:** Bilal Essaid (Morocco), Al Khribash Salah (Oman), Ibrahim Samia Abdelrahman (Sudan), Monnier Christophe (France), El-Kammar Ahmed (Egypt), Bouabdelli Abdelhak (Morocco), Gasquet Dominique (France).

**Theme 24 - Marine Geosciences and Oceanography**
**Convenors:** Kouadio Affian (Cote d'Ivoire), Begun Tatiana (Romania), Zourarah Bendahou (Morocco), Brenon Isabelle (France).

**Theme 25 - Rock Deformation, Structural Geology and Metamorphic processes**
**Convenors:** Ouzegane Khadidia (Algeria), Abdelsalam Mohamed (USA), Laduron Dominique (Belgium), Sara Vandycke (Belgium), Hamimi Zakaria (Egypt), Olivier Philippe (France), Bozkurt Erdin (Turkey), Essaifi Abderrahim (Morocco), Haissen Fouzia (Morocco).

**Theme 26 - Palaeontology and Palaeo-anthropology**
**Convenors:** Noubhani Abdelmajid (Morocco), El Kamali Nezha (Morocco), Randrianaly Hasina Nirina (Madagascar).

**Theme 27 - Biostratigraphy**
**Convenors:** Meline-Dobrinescu Mihaela (Romania), Toufiq Abdelkabir (Morocco), Ben Ismaïl Kmar (Tunisia), Slimani Hamid (Morocco), Tea Juliette (Côte d'Ivoire), Lazraq Nezha (Morocco), Ben Haj Ali Nébia (Tunisia).

**Theme 28 - Sedimentary Processes**
**Convenors:** Cherroud Mohamed (Morocco), Kazanci Nizamettin (Turkey), Jourani Essaïd (Morocco), Sow El Hadji (Senegal), Ouajhain Brahim (Morocco), Boumir Khadiga (Morocco), Chellai Hassan (Morocco).

**Theme 29 - Stratigraphy**
**Convenors:** Abed Abdellkader (Jordan), Sallam Emad (Egypt), Ettachfini El Mostafa (Morocco), Ouarhache Driss (Morocco), El Got Gamal (Egypt).

**Theme 30 - Geomorphology, Quaternary Geology & Geoarcheology**
**Convenors:** Issawi Bayh (Egypt), Zaghloul Najib (Morocco), Barhouni Néjib (Tunisia), Filli Abdellah (Morocco), Fekri Hassan (Egypt), Mohamed A. Hamdan (Egypt).

**Theme 31 - Geophysics**
**Convenors:** Jaffal Mohamed (Morocco), Nabawy Bassem (Egypt), Aïfa Tahar (France), Nebdi Hamid (Morocco), Boujemaoui Mustapha (Morocco), Harbi Assia (Algeria), Mehdi Khalid (Morocco), Al-Amri Abdallah (Saudi Arabia), Sahab Mohammed (Morocco), Lachhab Ahmed (USA).

**Theme 32 - Planetary Sciences**
**Convenors:** Martinez-Frias Jesus (Spain), Ibhi Abderrahmane (Morocco), Jelloul Abdelhay (Algeria), Morcos Fady (Egypt).

**Theme 33 - Museums and sustainable socio-economic development**
**Convenors:** Seghedi Antoneta (Romania), De Wever Patrick (France), Masrour Moussa (Morocco).

**OPEN SESSION**
All other contributions, which might not fit to any of the above sessions, should be submitted to the open session.
**Convenors:** Errami Ezzoura (Morocco), El Obaidi Saad (Lybia), Al-Bassam Abdelaziz (Saudi Arabia), Al-Michwet Ali (Koweït).

**SUGGESTIONS**
Dear colleagues, if you would like to propose a theme that it is not on the list, please contact us and send your proposals. Thank you in advance for your collaboration.

**INSTRUCTIONS FOR SUBMISSION OF ABSTRACTS**
All authors are requested to submit their abstracts which will be reproduced in an Abstract Volume to be distributed to the participants. All abstracts should be prepared according to the guidelines given below.
General guidelines
The abstract should not exceed 1 page (500 words) in English, French or Arabic. The topic covered should be relevant to the sub-themes of the meeting. The name, address (telephone, fax and e-mail) of the communicating author must be clearly specified.
Deadline for submission of abstracts: October 30th 2017. The names of the co-authors should be written in capital letters to allow the distinction from the first names.

Guidelines for preparation of the abstract
The abstracts should be laid out in accordance with the main formatting points listed below. A limited amount of re-formatting will be undertaken by the conference secretariat, but submissions that are grossly aberrant will be returned to authors for correction.
* It must be submitted electronically in MSWORD
* The preferred font is TIME; title 14pt / affiliations 12pt / text 10pt, with single line spacing.
* The text must be typed leaving a 3 cm on the right and 2.5 cm on the top, bottom, and left margins.
* Headings may be used
* Figures and tables may be included and embedded in the text file
* Selected references may be included at the end of the extended abstract
* For any queries or problems please do not hesitate to contact the conference secretariat on its email address congress.morocco@gmail.com

Submission of the abstract
The abstracts should be sent as an attached file to congress.morocco@gmail.com before 30th October 2017. The name of the electronic file must include the name of the first author, e.g. Salisu.doc. You will receive your acceptance and invitation letters within few weeks after the reception of your registration forms and abstracts.

LANGUAGE
The languages of the conference are English, French and Arabic.

POSSIBILITY OF PUBLICATION OF PAPERS
More details will be communicated in the second circular.

PROVISIONAL PROGRAMME
- 15-18 March 2018 Pre-conference field trips
- 19 March 2018 Workshops/Courses/Trainings/Roundtables
- 20-21 & 23-24 March 2018 Presentations of papers
- 22 Mars 2018 One day field trip dedicated to all participants
- 24-29 March 2018 Post-conference field trip in Morocco

FIELD TRIPS
Pre-conference field trips

F1 - Cenozoic volcanism of Hoggar (Algeria)
The field trip is focused on Cenozoic volcanism of Hoggar (Algeria) especially the Atakor massif which is situated ca 80 km from Tamanrasset. With ca 250 km of diameter, it is composed of basalt flows, trachyte and phonolite. The massive highest peak is Tahat (2.918 m). The “Charles de Foucauld” summer hermitage, situated at Assekrem, 80 km as the crow flies from Tamanrasset offers one of the best panoramic views of the region.

Duration: 3 days
Fees: 350 €/ person (+250€ for the flight Alger-Tamanrasset- Alger)
The field trip fees include the guide book, 2 nights’ accommodation and meals during the field trip and the transportation excluding the internal flight from Alger to Tamanrasset.

**F2 - Archean Reguibat Shield (North Western Mauritania)**
The Reguibat Shield is composed of two main units with an age varying from 3.5 Ga to 1.6 Ga. The western units of Archean age consist of Banded Iron Formations (BIF) and migmatitic gneisses, and the eastern units are of Birrimian age, being composed of granitoids and volcanic rocks. Among the sites that will be visited, the Tasiast Gold mine, the Chami green belt stone, the Archean Banded Iron Formations, the foidic syenite of Tijirit corridor.

*Duration: 4 days*
*Fees: 450 €/person*

The field trip fees include the guide book, the accommodation during 3 nights, the transportation and the meals during the field trip.

**F3 - Tataouine Aspiring Geopark (Tunisia)**
Tunisia is situated between western and the Eastern Mediterranean basins which gives it a special interest in the geological history of the region. In the South-East of Tunisia, the geological series that covers the Tataouine basin, tells us another story related to the opening of the Tethys during the Mesozoic Era. The area consists of a series of sub-meridian cliffs separated by broad plains. These escarpments allow the visitors to go up in altitude from the plain of Gabes Gulf coast to the highlands of Dahar which plunges gradually westward before disappearing under the sand dunes of the Eastern Grand Erg. Adding to its geological history, the area consists of a rich cultural, archaeological and natural heritage.

*Duration: 4 days*
*Fees: 450 €/person*

The field trip fees include the guide book, the transportation from the Djerba airport, the accommodation during 3 nights and meals during the field trip.

**F4 - Talassermante National Park and Ghomara coast (Morocco)**
Crossing Oued Laou valley allows to make a break through the National Park of Talassermante and to have an idea on the internal areas of the Alpine Rif chain situated in the northern part of Morocco. The trip will go also through the Ghomara coast with its Beni Bousera ultramafic massif, which is a tectonically emplaced body of upper mantle material, and their magnificent beaches on the Mediterranean Sea.

*Duration: 3 days*
*Fees: 350 €/person*

The field trip fees include the guide book, the transportation, the accommodation during 2 nights and meals during the field trip.

**F5 - The Mio-Plio-quaternary volcanism of the Middle Atlas and its mantelic and lower-crustal xenoliths (Morocco)**
The Middle Atlas is a NE-SW trending intra-continental belt, about 80 km width and 200 km length. It occupies the central part of Morocco between the western and the eastern “Mesetas”. Moroccan Mio-Plio-Quaternary volcanism is located on NE-SW direction, highlighted by a thinned lithosphere, called Morocco Hot Line or MHL. This trend extends to the Mediterranean coast beside Oujda where it is dated from 6.2 to 1.5 Ma, and the Oran region of Algeria (4 to 0.8 Ma). It can be connected with a linear trend defined by southern Spain and France Plio-quaternary lavas. The Middle Atlas contains the largest volcanic province in Morocco, where more than one hundred
well preserved strombolian cones and maars emitted numerous mafic lava flows with Miocene (14.6-10.6 Ma) to the Plio-Quaternary (3.92-0.5 Ma) ages. This volcanism of the Atlas system is exclusively intraplate alkaline type (i) alkali basalts, (ii) basanites, (iii) subalkaline basalts, and (iv) nephelinites. The alkali basalts, basanites, nephelinites are associated with intermediate to advanced lava; but in the Rif, it evolves during time from calc-alkaline, to shoshonitic and to alkaline type. Basanites are notably xenoliths-free, and the peridotite xenoliths were found solely in the alkali basalts.

Duration: 3 days
Fees: 350 €/person

The field trip fees include the guide book, the transportation, the accommodation during 2 nights and meals during the field trip.

F6 - From rifting to collision in central High Atlas (Morocco): sedimentary and tectonic evolution of an intracontinental Peri-Tethyan basin.

Duration: 3 days
Fees: 350 €/person

The field trip fees include the guide book, the transportation, the accommodation during 2 nights and meals during the field trip.

Intra-conference field trips - One day
The fees of the one day intra-conference field trips are included in the registration fees. The participant should choose one field trip. Additional intra-conference field trips may be added in the second circular.

The Doukkala-Abda aspiring geopark, situated along the Atlantic coast in the north western part of central Morocco, has a rich geodiversity that extends from the Late Pan-African to Quaternary. The one day intra-conference field trips in the geopark offer 3 geotrails with different aims.

F7 - Doukkala-Abda aspiring geopark (Morocco) - Geotrail 1
The first geotouristic trail in the Doukkala-Abda aspiring geopark was launched during the celebration of the first edition of the Day of Earth Sciences in Africa and Middle East in 2013. This geotrail, linking geological and historical sites, aims to promote Doukkala hinterland as a geotouristic destination instead of predominated-seaside tourism in the region and also to shed light on their exceptional geographical, historical, architectural and traditional frames. The field trip goes through the unique Triassic basin in the territory which is cut by famous Oum Er-Ribia River, giving several geomorphosites of educative, scientific and socio-economic importance such as the didactic angular unconformities between the middle Cambrian formations, predominantly shales, the continental Triassic formations and the marine Plio-Quaternary sedimentary units. The late Triassic formations are characterized by several interbedded tholeiitic basalt flows, related to the Central Atlantic Magmatic Province (CAMP). The area hosts the first dam built on the Moroccan territory that entered into service in 1929.

We are also planned to visit: i) Lakouassem village, one of the latest bastions of falconry in Morocco that it is classified as Intangible Cultural World Heritage; ii) Kasbah Boulaouane geosite which consists of a kasbah built in 1710 on a promontory that overlooks didactic meanders of Oum-Er-Rbia River; iii) Tazotas, a geosite of cultural value. Tazotas are dry constructions with a specific architecture. This type of architecture, in Morocco, is restricted to Doukkala-Abda region and its origin is still controversial.

F8 - Doukkala-Abda aspiring geopark (Morocco) - Geotrail 2
This second geotrail allow the participants to have an overview on the coastal geosites of the Doukkala-Abda aspiring geopark such as the Jorf Lasfar Cretaceous escarpment, the Oualidia-Sidi Moussa Lagoon which is a RAMSAR site since 2005 and a Site of Biological and Ecological Interest (SIBE) and the Lalla Fatna Jurassic-Cretaceous escarpment. The latter is lithologically and paleontologically rich and plays an important role in illustrating a transgressive evolution from lagoonal to plate-form environments which leads to a palaeogeographical reconstruction of this region. The geotrail ends in Safi city which is known by its traditional and modern pottery.

F9 - Doukkala-Abda aspiring geopark (Morocco) - Geotrail 3
The third geotrail is dedicated to the cultural monuments to El Jadida city and neighboring villages including the Mazagan Portuguese city which is a world heritage site that gives a fantastic overview on the Mazagan bay. This latter is considered as one of the earliest settlements of the Portuguese explorers in West Africa, on their route to India.

F10 - Late Cretaceous and lower Paleogene phosphate deposits of Morocco
Late Cretaceous and lower Paleogene phosphate deposits constitute one of the main economic resources of Morocco which is the first exporter of phosphates and its derivatives. These marine sedimentary deposits are one of the best examples of national geological heritage with an exceptional richness in exquisitely preserved fossil remains. These archives include, apart teeth of extinct sharks and rays which are collected by millions, several vertebrates groups of reptiles, seabirds, and mammals carried from the nearby continent.

Post-conference field trips

F11 - Cratons and mobile belts: keys from the northern boundary of the West African Craton (Anti-Atlas belt of Morocco)
This field trip that crosses three main geological domains, the Variscan Meseta, the intracontinental Alpine High-Atlas and the Precambrian Anti-Atlas domains, gives the participants an overview on the rich and varied Moroccan geology and geomorphology that span over 2000 Ma of Earth History, from the Eburnean to the Quaternary. Some sites that will be visited in the Anti-Atlas are the Precambrian Neoproterozoic ophiolites, the Bou-Azzer mine, the famous Major Anti-Atlas Fault, the very well preserved Pre-Pan-African passive margins sediments with their spectacular sedimentary features, the Ediacaran diamectites, the Palaeoproterozoic and Pan-African magmatic rocks, the Ediacaran Stromatolites, didactic geological unconformities, the Todra Gorges dug in Jurassic formations, the Neogene Nephelinites.

The participants will enjoy fantastic landscapes and panoramic views and will be introduced to the history of Morocco through the visit of some cultural sites such as world heritage Aït Ben Haddou Kasbah which is a site and the small Tazenakht village with its traditional handmade carpets and its Saffron.

Duration: 6 days
Fees: 650 €/person

The field trip fees include the guide book, transportation, accommodation and meals during the field trip. The first and last nights are not included.

The congress and the pre-conference and post-conference field trip fees should be paid to the bank account that will be provided in the second circular or on desk during the conference. Proof of payment should be sent by email to the organizing committee.

CONFERENCE REGISTRATION FEES
300€ - Participants from developed countries
280€ - Participants from developed countries & member of the organizing organizations (ArabGU,
AAWG, AGN).
200€ - Convenors and participants from underdeveloped and developing countries.
180€ - Participants and students from underdeveloped and developing countries & members of the
organizing organizations (ArabGU, AAWG, AGN).

Registration fees cover the abstract volume, the coffee breaks, the conference lunches, and the intra-
conference field trip. The Workshops/Courses/Trainings of the 19 March 2018 are not included in
the fees. More information will be given in the second circular.

Short course fees: 50 €/ person

PAYMENTS
More information will be given in the second circular.

DEADLINES
December 2016 - First circular
May 2017 - Second circular
October 2017 - Deadline for registration and abstract submission
January 2018 - Final circular - Conference program

CONTACT
Secretariat
Email: congress.morocco@gmail.com
Phone: +212 668038116
Fax: +212 523342187

ARABIAN GEOSCIENCES UNION
Arabian Geosciences Union (ArabGU) is a nonprofit international association dealing with
geosciences for the benefit of humanity in the Arab World and neighboring countries, as well as
worldwide. ArabGU was established in April 2013. The ArabGU aims to promote, disseminate and
contribute to geosciences as a whole, with emphasis on the Arab World, through organizing an
annual international meeting bringing distinguished scientists and professionals together to discuss
topics of broad interest. Among the main objectives of the ArabGU will be to establish a peer-
reviewed, open-access scientific journal, Arabian Geo-Frontiers (AGF), that publishes high quality
original research, as well as review articles, in all topics of Earth Sciences.

www.ArabGU.org

AFRICAN ASSOCIATION OF WOMEN IN GEOSCIENCES
During geological meetings, the participation of women geoscientists was noticed and raised as a
concern. In order to help to rectify this discrepancy, a decision was taken to form an association in
order to encourage women geoscientists to participate in Earth Sciences related conferences and to
inform about or become involved in gender issues related to the Earth Sciences. In 1995, the
African Association of Women in Geosciences was born in Nairobi, Kenya.

The objectives and purposes for which the Association is constituted are to: Promote the
advancement of scientific and technological knowledge in the field of geosciences; Disseminate
information on scientific and technical research and discoveries and promote public understanding
of the role of geosciences in Africa’s development; Establish and maintain relations between
African scientists and the international scientific community; Provide a forum for discussion and
cooperation in geosciences and other related professions in Africa; Assist African governments in
the quest for capacity building in geosciences and its applications; Cooperate with relevant African
governments in the formulation of policies and program designed to encourage the development
and application of geosciences for Africa’s development; Publish and distribute a bulletin and/or
other publications in the field of geosciences development in Africa; Organize conferences, seminars, symposia, training courses and workshops in various areas of geosciences; Highlight and seek solutions to problems faced specifically by women and grassroots communities in Africa in the area of geosciences; Encourage and mobilize support for education, training and research in order to assist African women in their acquisition of specialized skills for leadership in geosciences; Identify, promote and advise on the importance and preservation of geological sites in Africa.

www.aawg.org
https://www.linkedin.com/groups/6520809

AFRICAN GEOPARKS NEWTWORK
In order to help to improve the situation regarding geoheritage in both Africa and the Middle East, the African Association of Women in Geosciences (AAWG) created the African Geoparks Network (AGN) during the preparatory meeting of its fifth conference entitled “Women and Geosciences for Peace” held in Abidjan, Cote d’Ivoire in May 2009. This move proved successful, given widespread support and subsequent adoption of the AGN as an affiliate organization of AAWG.

The aims of AGN include but are not limited to (i) Identifying geosites; (ii) Making an inventory of geosites of outstanding value in Africa and the Middle East; (iii) Creating and maintaining dynamic GIS data bases; (iv) Promoting and increasing the awareness amongst policy makers and the general public in Africa and the Middle East, in particular local communities, about the necessity for the protection and the utilization of geological heritage through the creation of geoparks for local socio-economic sustainable development; and (v) Building the capacity of the local population in the field of geoheritage and geo-conservation through a strong network including the organization of conferences, seminars, symposia, training courses and workshops focusing on the non-professional community. Such a network can also serve as a platform to share ideas, exchange information on experiences, best practices, new developments and trends in geoheritage and related disciplines. The resulting synergies are benefitting sustainable socio-economic development in numerous regions in Africa and Middle East.

www.africangeoparksnetwork.org
https://www.facebook.com/groups/africangeoparksnetwork/
https://www.linkedin.com/groups/8298993

DAY OF EARTH SCIENCES IN AFRICA AND MIDDLE-EAST
The African Association of Women in Geosciences and the African Geoparks Network are proclaiming the 20th March as a “Day of Earth Sciences in Africa and Middle East, DESAME”. The day aims to increase the awareness about the role that earth scientists could play to help to build a peaceful, healthier and wealthier continent. First celebrated in 2013, DESAME is being celebrated in 2018, under the thematic "Earth Sciences for Society".

Why the 20th March?
Equinoxes have been celebrated in cultures all over the world. In the northern hemisphere the March equinox marks the start of spring and has long been celebrated as a time of rebirth. The 20th March corresponds to the March equinox where night and day are nearly of the same length all over the world. However, even if this is widely accepted, it isn't entirely true. The March equinox occurs the moment the sun crosses the celestial equator from south to north. This happens either on March 19, 20 or 21 every year. In that way, the activities, related to the DESAME, could be extended to the 19th and the 21st March".

Activities
Conferences, seminars, courses, presentations, field trips, exhibitions, films, games, visits of Earth
Sciences departments...etc. It is up to you to be creative and innovative in order to meet the needs of your respective societies.

**Target public**

Pupils from primary and secondary schools, students from universities, policy makers, large public, potential partners and sponsors...all the components of your respective societies.

*https://www.facebook.com/groups/DESAME/*
Registration Form
Joint International Conference AIC2, CAAWG9, ICAAG3
El Jadida/Marrakech, Morocco, March 20-24, 2018

Family Name (Ms/M)........................................................................................................................................
First Name...........................................................................................................................................................
Institution / Company Address
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
City................................................................................................Country........................................................................
Phone ........................................................Fax........................................................................................................
E-mail...................................................................................................................................................................
I am interested in attending the conference ☑ I will present a paper ☑ Oral ☑ Poster ☑

Title of the paper
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
Theme....................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
I would like to participate to the field trip Yes ☑ No ☑

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>F6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-conference field trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-conference field trips</td>
<td>F7</td>
<td>F8</td>
<td>F9</td>
<td>F10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-conference field trips</td>
<td>F11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am interested in attending a pre-conference short course Yes ☑ No ☑

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Geoheritage/Geoparks</td>
<td>Geoethics</td>
<td>Remote sensing and GIS</td>
</tr>
<tr>
<td>Earth Sciences Education</td>
<td>Geochemistry, Geochronology and Isotopic geochemistry</td>
<td>Biostratigraphy</td>
</tr>
</tbody>
</table>

In order to propose an adapted capacity building program, please precise if you have any specific need.
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................
......................................................................................................................................................................

Please, type or complete this form in print letters and return it accompanied by your abstract(s) before the 30th October 2017 to the following email congress.morocco@gmail.com