



Joint Conference: International Dyke Conference (IDC 8)-Large Igneous Provinces (LIPs 8)-Rodinia 2023

JOIN US IN A GEOSCIENCE PARADISE : A VOYAGE THROUGH EARTH HISTORY IN THE KINGDOM OF MOROCCO



Dispersed pillow lavas associated with hyaloclastites at the bottom of the Intermediate Basalt Formation of the 201 Ma Central Atlantic Magmatic Province (CAMP, High-Atlas, Morocco)

1 st CIRCULAR

Key Dates and Location: 29th May-16th June 2023 @Marrakech (Morocco)

Our History

Joint Conference: International Dyke Conference (IDC 8)-Large Igneous Provinces (LIPs 8)-Rodinia 2023

International Dyke Conference (IDC 8)

The Eighth International Dyke Conference (IDC8) will concentrate on mafic dyke swarms and related igneous associations, e.g., sills, kimberlites, syenites, carbonatites, volcanics, etc., with a special emphasis on paleogeographic reconstruction based on geological comparison and paleomagnetic studies. The IDC8 continues the every-five-year tradition started in Toronto, Canada in 1985 by Prof. Henry C. Halls (University of Toronto). Subsequent IDCs were held in Australia (1990), Israel (1995), South Africa (2001), Finland (2006), India (2010), and China (2016).

Large Igneous Provinces (LIPs 8)

The Large Igneous Provinces conference series was launched in 2007 in Novosibirsk, Siberia, Russia by Prof. Alexander Borisenko and colleagues, and continued in 2009 – Novosibirsk, Russia; 2011 – Irkutsk, Russia; 2013 - Hanoi, Vietnam; 2015 – Irkutsk, Russia; 2017 - Chengdu, China- Tomsk, Russia ; 2019. The early conferences (2007-2015) were focused on the LIP record of Asia, but the Tomsk and the current focus is more global. The Eighth LIPs conference will again cover all aspects of this rapidly expanding field.

Rodinia 2023

The Rodinia conference series began in the form of Tectonics Special Research Centre symposia (1998-2005) that morphed into dedicated Rodinia conferences in Edinburgh, Scotland (2009); Moscow, Russia (2013); and Townsville, Australia (2017). The planned Rodinia meeting herein will continue this tradition and join forces with the other conference series noted above.

West African Craton's magmatic and tectonic legacy, 2 Ga to present

The last decade has revealed West African craton as a key witness to long-term magmatic and tectonic processes, occupying important locations within ancient supercontinents. Consolidated in the Eburnian tectonic event of ca. 2.0 Ga, the craton was long thought to be devoid of significant igneous and tectonic activity until Pan-African orogenesis 1500 million years later. However, numerous ca. 1.7-1.4 Ga mafic dyke swarms have now been dated by U-Pb on zircon and baddeleyite, both in northern and southern regions of the craton; these swarms

may be related to protracted breakup of the Nuna supercontinent. In addition, craton-wide ca. 0.9-Ga mafic magmatism could be related to the Rodinia supercontinent cycle. Lacking direct records of late Mesoproterozoic (“Grenvillian”) orogenesis, West African craton has typically been relegated to the outer periphery of Rodinia reconstructions, but recent documentation of Mesoproterozoic detrital zircons within autochthonous cover strata suggests some proximity to Rodinia-forming orogens.

Within the post-Rodinia era, West African craton’s margins were all reworked by the ca. 0.6-0.5-Ga Pan-African orogeny, coeval with multiple episodes of glaciation and the widespread Ouarzazate (Peri-lapetus Magmatic Province) LIP. The Pan-African interval can be viewed either as a culmination of Pannotia supercontinent amalgamation, or a subsidiary step toward eventual Pangea assembly at ca. 0.3 Ga. Northern regions of the craton are directly affected by that Hercynian orogenesis. Breakup of Pangea is spectacularly documented by Central Atlantic Magmatic Province (CAMP) magmatism and rift-related sedimentation at ca. 0.2 Ga. At present, post-Alpine subduction has migrated westward to the Strait of Gibraltar, perhaps initiating subduction within the Atlantic realm that will close interior oceans *en route* to the next future supercontinent.

In celebration of all these diverse geological records, spectacular rock exposure, fascinating culture, and friendly people, we invite you to join us in the “Geological Paradise” of Morocco in 2023!

General Information

When

Meeting: June 5-9, 2023

Pre-conference field trip: May 29- June 3, 2023

Mid- conference field trip : June 7, 2023

Post-conference field trip: June 10-16, 2023

Where

Cadi Ayyad University Conferences Center (Centre de Conférences de l'Université Cadi Ayyad)

Who

Anyone who is willing to help organizing the Joint Meeting Conference IDC8-LIPs8- Rodinia 2023, please contact: youbi@uca.ac.ma

Conference Language

The official language of the conference will be English.

Scale

We are expecting 600 participants including ~120 foreigners

Outline of the Program

Important dates

Second Circular: 15 January 2023

Abstract and on-line registration opens: 15 February 2023

Close of abstract submission: 15 April 2023

Early registration due: 30 February 2023

Conference: 5-9 June 2023

4 June 2023: On-site registration (3-6 PM)/ Cadi Ayyad University Conferences Center

5-9 June 2023: On-site registration (8:30 AM – 6 PM)

5 June 2023: Welcome Reception (6 PM – 8:30PM)

5-9 June 2023: meetings (8:30 AM – 5:30 PM)

9 June 2023: Celebration in Honour of Prof. Henry HALLS, Prof. Hervé BERTRAND, Prof. Ahmed EL HASSANI & Prof. El Hassane CHELLAI (6 – 9 PM)

Tentative Pre-, Mid-, and Post- Conference Field Trips: 29 May- 3 June , 7 June & 10-16 June, 2023

Pre- Conference Field Trip A (6 days): 29 May- 3 June 2023 , Trip to the Rif Belt

Description and itinerary will be provided in the second circular

Field Leader: Prof. Omar Saddiqi

Mid- Conference Field Trip B (1 day): 7 June 2023, Trip to the Central Atlantic Magmatic Province (CAMP) of the High Atlas

Description and itinerary will be provided in the second circular

Field Leaders: Prof. Nasrddine Youbi & Prof. El Hassane Chellai

Post- Conference Field Trip C (7 days): 10-16 June, 2023, Trip to the Anti-Atlas Belt.

Description and itinerary will be provided in the second circular

Field Leaders : Prof. Hassan Admou, Prof. Abderrahmane Soulaïmani & Prof. Nasrddine Youbi

Field guide books will be available on-line before the conference

Call for themes/topics

Here are the proposed topics for the Joint Meeting Conference IDC8-LIPs8-Rodinia 2023 :

- 1) Supercontinent Geodynamics, Plumes, LIPs, and Rifting
- 2) Nuna/Columbia Reconstructions
- 3) Rodinia Reconstructions
- 4) LIPs and their plumbing systems (including dykes)
- 5) Supercontinents, LIPs, and Ore Deposits
- 6) Supercontinents, LIPs, and Climate Change
- 7) Planetary LIPs
- 8) Dykes collisional/subduction settings

Call for Abstracts

Abstracts should be submitted by uploading on the Conference site as attached files in DOC or DOCX format:

Please name the attached file by the name of the first author (for example Smith.doc).

The abstract should be no longer than two A4 pages including tables, illustrations, and references with all-around margins of 2 cm. The text should be prepared using Microsoft Word (version 2003 and newer): Times New Roman, 10, single-spaced, wide justified, not paginated, 1 cm indented.

Figures should be saved as JPG or TIF files at a resolution dpi and included directly in the text (position in the center). Figure captions (Times New Roman, 10) should be included below the figure.

Figures, tables, and references should be referred to in parenthesis: (Fig.1), (Table 2), (Smith et al. 2005). References should be separated by a single line from the main text, alphabetically ordered, typed in Times New Roman, 10.

The first author can submit only two papers while co-authorship in other papers is not restricted. The Organizing Committee keeps a right to reject the abstracts out of the topic of the conference.

The Conference Committee

The Honorary Chairs

Henry C., HALLS (University of Toronto, Toronto)

Hervé, BERTRAND (University of Lyon, France)

Ahmed, EL HASSANI (Academy Hassan II of Science & Technology)

El Hassane, CHELLAI (Cadi Ayyad University)

Local Organizing Committee (Cadi Ayyad University, Marrakech, Morocco)

Nasrddine, YUBI, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco) (Leader)

El Hassane CHELLAI, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Hind, EL HAIBI, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Amina WAFIQ, , (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Hassan IBOUH, (Faculty of Science & Technology-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Mohamed, HIBTI, (Faculty of Science & Technology-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Moulay Ahmed, BOUMEHDI, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Mohamed Khalil, BENSALAH, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Hassan ADMOU, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

Abderrahmane SOULAIMANI, (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

El Mostafa, MOUGUINA (Faculty of Sciences-Semlalia, Cadi Ayyad University, Marrakech, Morocco)

International Scientific Committee

In preparation

National Scientific Committee

In preparation

Call for sponsorship

Sponsors are welcome. There will be an exhibition area during the four-day meeting. Advertisement will be also available inside the proceedings of the conference , as well as the field guide books, the abstracts, and the program leaflets.

The sponsors will receive some or all of the below privileges

Full conference registration including all social events.

Company name and logo on the conference homepage, as well as link to your company homepage.

List your company name and logo in the printed conference brochure as supporter (Logo must be provided by patron).

One page company advertisement inserting into the conference bag (to be provided by patron and approved by conference organizer).

One full color page advertisement in the printed conference abstract book, field trip guide book, and/or other proceedings.

One free demonstration desk in the conference venue (including one table, two chairs, one 220V electric power supply with a tripe plug).

Conference bag with advertisement on it.

Flash disk with advertisement on it.

For more information, please contact the conference secretariat.

Publication of Meeting Contributions

Following the tradition of the previous conference series (IDCs, LIPs, and Rodinia) we are planning to publish an edited book focussed on paleogeographic reconstructions based on the dyke record and its paleomagnetism and links to large igneous provinces. Details on paper submission will be provided in the Second Circular.

Because in addition to reconstructions there will be lots of other topics from the conference, we are also considering publishing a second special issue after the conference. This will depend on the wishes of the participants.

In addition, it is also possible to publish the abstracts to the meeting in a peer-reviewed journal

Best Oral/Post Presentation Award for young scientists

Follow the IDCs tradition, the conference committee will award best oral/post presentations of the meeting for young scientists (aged 40 or younger).

Celebration in Honour of Prof. Henry C HALLS, Hervé BERTRAND, Ahmed EL HASSANI & El Hassane CHELLAI

On 9th June, the IDC8, LIPs8, and Rodinia 2023 Conference will present a celebration party in honour of Prof. Henry C HALLS, Prof. Hervé BERTRAND, Prof. Ahmed EL HASSANI & Prof. El Hassane CHELLAI . This will include a traditional Moroccan performance.

Contacts and Correspondence

For scientific information:

Nasrddine YOUNI, Director of DLGR Lab Cadi Ayyad University, Faculty of Sciences-Semlalia, Department of Geology, P.O. Box 2390, Marrakech 40000, Morocco. Phone : + 212 - (524) 43 46 49. Extension 516. GSM (Office): + 212 (0654) 477 796. Fax: + 212- (524) - 43 67 69 E-Mail: youni@uca.ac.ma

Richard E., ERNST, (Richard.Ernst@Carleton.ca, Tel: 1-613-295-7955) Scientist in Residence, Dept. of Earth Sciences, Carleton University, Herzberg Building 1125 Colonel By Drive, Ottawa, Canada K1S 5B6

For registration, field trip, payment and others:

Name : Association “Society of Development of Science and Novel Technologies” (ASSOSDS-NT)

Bank : Crédit du Maroc, Agence 220 Sidi Abbad, Marrakech

Identité bancaire : Compte (IBAN): 021 450 0000220015030021 70

SWIFT: CDMAMAMC

Adresse: Faculté des Sciences-Semlalia, 40025 Marrakech PPAL, Morocco

Hotel reservation

Accommodation can be reserved through the Organizing Committee.

General information

Registration Fees

	Payment received until April 30, 2023	Payment received until May 15, 2023	Payment received until May 28, 2023
Industrial Participant	US\$ 1000	US\$ 1050	US\$ 1100
Regular Participant	US\$ 450	US\$ 500	US\$ 550
Student Participant (up to PhD. Level)	US\$ 225	US\$ 250	US\$ 275

This covers

1. Attendance at the conference
2. Final program and abstract book
3. Coffee/tea break on June 5-9 2023
4. Welcome Reception on June. 5, 2023
5. Buffet lunches on June 5-9, 2023
6. Conference Banquet on June 9, 2023

7. Conference administration

Fees for field trip

Including travel, meals, and hotel: not yet defined, coming soon.

Conference Venue

The conference will be held in the Cadi Ayyad University Conferences Center (Centre des Conférences de l'Université Cadi Ayyad). Sessions will take place in a meeting room equipped with video projectors that can link to PC. A dedicated area will be provided for poster sessions.

Passport and Visa

The participants native of the China, European Union, North America, Australia, Russia, numerous African and Asian countries do not need a visa to enter in Morocco (more than 66 countries). For the complete list of exempt countries, visit Morocco's The Minister of Foreign Affairs, African Cooperation and Moroccan Expatriates : <https://www.diplomatie.ma/en>

Letter of Invitation

Requests for formal letters of invitation to attend the conference should be directed to the Organizing Committee (youbi@uca.ac.ma). This invitation is intended to assist participants in travel and visa arrangements and does not imply financial support. Please request invitation letters only after the registration is open.

Currency Exchange

The Moroccan Dirham is the currency of Morocco. Our currency rankings show that the most popular Morocco Dirham exchange rate is the MAD to EUR rate. The currency code for Dirhams is MAD. In Morocco, only Dirhams is used. However, exchange centers can be found at airports, most hotels and large shopping centers. Visa, Master, American Express, Diners Club, and JCB are accepted in some department stores and hotels. But it might be difficult to draw cash with credit cards. The Bank of Morocco and most hotels can cash traveler cheques issued by any foreign bank or financial institution. Participants will need to show a passport.

Transportation

Taxis will be the best way to travel inside Marrakech. This is available from the international airport to the hotel and some key cultural treasures such as the Jamaa el Fna is a square and market place in Marrakesh's medina quarter, the Koutoubia Mosque, the Saadian Tombs, Menara Garden, Agdal Garden, Palmeraie, Bahia Palace, Majorelle Garden, etc.

About Marrakech

Marrakesh (also known by the French spelling Marrakech (/məˈrækɛʃ/ or /ˌmæɪəˈkɛʃ/;[4] Arabic: مراكش, Murrākuṣ; Berber: Meṛṛakec, ⵎⵕⵕⴰⵎⴰⵔ) is a major city of the Kingdom of Morocco. It is the fourth largest city in the country, after Casablanca, Fes and Tangier. It is the capital city of the mid-southwestern region of Marrakesh-Safi. Located to the north of the foothills of the snow-capped Atlas Mountains, Marrakesh is located 580 km (360 mi) southwest of Tangier, 327 km (203 mi) southwest of the Moroccan capital of Rabat, 239 km (149 mi) south of Casablanca, and 246 km (153 mi) northeast of Agadir.

Marrakesh is possibly the most important of Morocco's four former imperial cities (cities that were built by Moroccan empires). The region has been inhabited by Berber farmers since Neolithic times, but the actual city was founded in 1062 by Abu Bakr ibn Umar, chieftain and cousin of Almoravid King Yusuf ibn Tashfin. In the 12th century, the Almoravids built many madrasas (Koranic schools) and mosques in Marrakesh that bear Andalusian influences. The red walls of the city, built by Ali ibn Yusuf in 1122–1123, and various buildings constructed in red sandstone during this period, have given the city the nickname of the "Red City" or "Ochre City". Marrakesh grew rapidly and established itself as a cultural, religious, and trading centre for the Maghreb and sub-Saharan Africa; Jemaa el-Fnaa is the busiest square in Africa.

After a period of decline, the city was surpassed by Fes, but in the early 16th century, Marrakesh again became the capital of the Kingdom. The city regained its preeminence under wealthy Saadian sultans Abu Abdallah al-Qaim and Ahmad al-Mansur, who embellished the city with sumptuous palaces such as the El Badi Palace (1578) and restored many ruined monuments. Beginning in the 17th century, the city became popular among Sufi pilgrims for Morocco's seven patron saints, who are entombed here.

Like many Moroccan cities, Marrakesh comprises an old fortified city packed with vendors and their stalls (the medina), bordered by modern neighborhoods, the most prominent of which is Gueliz. Today it is one of the busiest cities in Africa and serves as a major economic centre and tourist destination. Marrakesh has the largest traditional market (souk) in Morocco, with some 18 souks selling wares ranging from traditional Berber carpets to modern consumer electronics. Crafts employ a significant percentage of the population, who primarily sell their products to tourists.

Marrakesh is served by Ménara International Airport and the Marrakesh railway station, which connects the city to Casablanca and northern Morocco. Marrakesh has several universities and schools, including Cadi Ayyad University. A number of Moroccan football clubs are located here, including Najm de Marrakech, KAC Marrakech, Mouloudia de Marrakech and Chez Ali Club de Marrakech. The Marrakesh Street Circuit hosts the World Touring Car Championship, Auto GP and FIA Formula Two Championship races.

About Morocco

Morocco; Arabic: المغرب al-Maghrib; French: Maroc), officially the Kingdom of Morocco, is a country in the Maghreb region of North Africa. Geographically, Morocco is characterized by a rugged mountainous interior and large portions of desert. It is one of only three countries (with Spain and France) to have both Atlantic and Mediterranean coastlines. The Arabic name al-Mamlakah al-Maghribiyah (Arabic: المملكة المغربية, meaning "The Western Kingdom") and Al-Maghrib (Arabic: المغرب, meaning "The West") are commonly used as alternate names.

Morocco has a population of over 38 million and an area of 710,850 km². Its political capital is Rabat. The largest city is Casablanca. Other major cities include Marrakesh, Tangier, Tetouan, Salé, Fes, Agadir, Meknes, Oujda, Kenitra, and Nador. A historically prominent regional power, Morocco has a history of independence not shared by its neighbours. Its distinct culture is a blend of Arab, Andalous, Berber, African, and European influences.

Morocco is a constitutional monarchy with an elected parliament. Executive power is exercised by the government, while legislative power is vested in both the government and the two chambers of parliament, the Assembly of Representatives and the Assembly of Councillors.

Morocco's official languages are Arabic and Berber. Moroccan Arabic, referred to as Darija, and French are also widely spoken. Morocco is an influential member of the Arab League and a part of the Union of Africa and Union for the Mediterranean. It has the sixth-largest economy in Africa.