**International Conference on Bio-mediated and Bio-inspired Geotechnics (ICB2G) - May 2024**

**Objective**

The conference seeks to present the state of the art in the field of Bio-mediated and Bio-inspired Geotechnics (CBBG), promote co-operation and exchange of information about the emerging field of bio-geotechnics; develop and promote improved modeling of bio-mediated and bio-inspired processes; translate fundamental bio-inspired knowledge into enabling technologies with future commercialization potential; and facilitate the adoption of bio-mediated and bio-inspired solutions into geotechnical engineering practice.

**Dates**

2-3 days May 13-18 (optional 6-10 May)

**Support**

Confirmed

* ISSMGE TC 102 - Ground Property Characterization from In-Situ Tests (Jason de Jong)
* ISSMGE TC 215 – Environmental Geotechnics (Ed Kavazanjian, Malek Bouazza)

To be confirmed

* ISSMGE TC211 – Ground improvement Noël Huybrechts, Jérôme Racinais
* Geo-institute??
* TRB?? Agreement with the committee chairs?
* Specialty conference

**Proceedings**

Find publisher for proceedings E3S?? Bitech..

**Scope of conference**

* Facilitate knowledge exchange on biogeotechnics between
  + international researchers,
  + industry,
  + agencies,
  + educators
* Provide a state of the art on biogeotechnics
* Kick-off for a broadly supported research coordination network (RCN), workshops + shortcourses

**Targeted number of attendants**

200 to 400

**Registration options**

Basic remote registration ($250??) includes

* abstract,
* oral/poster presentation
* paper in peer-reviewed proceedings (or journal special issue)
* link to zoom access to video conference
* proceedings

In person attendance ($500?) includes

* all of above
* 4 coffee breaks
* 1 x ice breaker
* 2 x lunch
* 1 x conference dinner

Extra activities

* In person short courses ($150 pp), include lunch and coffee breaks)
* Excursion (Frank Loyd Wright ($100 pp)
* (Engineering) Geology excursion ($250 pp 2 days, including 1 overnight stay in Flagstaff)
* Golf clinic with Ed ($150 pp)

**Proceedings**

Special issue in a journal or traditional type of proceedings, SCOPUS index

**Venue:**

On campus

Memorial Union / Westin Hotel

150 -400 people

Up to 200 in person up to 200 online

**Accommodations**

* Reserve block accommodations at local hotels

**Program**

* 1 day short courses
* 2 days symposium workshop
  + Tentative topics:
    - Bio-mediated geotechnics
      * Biochemical pathways
        + Biogas
        + Biominerals
      * Reactive transport modeling
      * Coupled modeling of bio-mediated soils
      * Monitoring methods
      * Microscale
      * Field implementation
    - Bio-inspired geotechnics
      * Bio-inspired foundations
      * Robotics
      * Sensors
      * Underground communication
      * Snake-skin inspired surfaces
    - Education & Outreach in Biogeotechnics
    - Industry
* 1 or 2 day field trips
  + Frank Lloyd Right West Taliesin
  + Arcosanti
  + Rawhide
  + 2 day Grand Canyon Excursion
  + Superstition/South Mountain
  + Sedona

**Schedule**

***Day 1: Monday***

9:00 – 17:00 workshops

18:00 – 20:00 Icebreaker reception

***Day 2: Tuesday***

|  |  |  |  |
| --- | --- | --- | --- |
| 8:00 | opening & registration | | |
| 8:30 | plenary session 1 | | |
|  | 3 x 30 minute presentation | | |
| 10:00 | coffee break |  |  |
| 10:30 | session 2a | session 2b | session 2c |
|  | 6 x 15 min | 6 x 15 min | 6 x 15 min |
| 12:00 | lunchbreak + poster session | | |
| 13:30 | session 3a | session 3b | session 3c |
|  | 6 x 15 min | 6 x 15 min | 6 x 15 min |
| 15:00 | coffee break | | |
| 15:30 | plenary session 4 | | |
|  | 3 x 30 minute presentation | | |
| 17:00 | end of sessions | | |
| 18:00 | conference dinner | | |
| 20:00 | end of day 1 | | |

6 keynotes + 36 paper presentations

***Day 3: Wednesday***

|  |  |  |  |
| --- | --- | --- | --- |
| 8:00 | opening & registration | | |
| 8:30 | plenary session 5 | | |
|  | 3 x 30 min | | |
| 10:00 | coffee break |  |  |
| 10:30 | session 6a | session 6b | session 6c |
|  | 6 x 15 min | 6 x 15 min | 6 x 15 min |
| 12:00 | lunchbreak + poster session | | |
| 13:30 | session 7a | session 7b | session 7c |
|  | 6 x 15 min | 6 x 15 min | 6 x 15 min |
| 15:00 | coffee break | | |
| 15:30 | plenary session 8 | | |
|  | 3 x 30 min | | |
| 17:00 | end of conference | | |

6 keynotes/debates + 36 paper presentations

***Day 4-5***

Fieldtrips

**Organizing committee**

* Leon van Paassen,
* Julian Tao
* Ed Kavazanjian
* Hamed Khodadadi Tirkolaei
* Claudia Zapata
* Paola Bandini
* Jason de Jong
* David Frost
* All Senior investigators
* IDEA team

**Scientific advisory board**

**Important dates**

Call for sessions January 1, 2022

Call for abstracts September 2022

Abstracts Due: December 2023

Full Paper Invitations Begin: February, 2023

Draft Full Papers due: July, 2023

Final Full papers due December 2023

B2G 2024 Symposium May 13-18 2024

**Budget**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PROJECTED REVENUE** |  | # | $/# |  |
| Early Registration |  | 200 | 400 | $80,000.00 |
| Students |  | 50 | 50 | $2,500.00 |
| Late registration |  | 50 | 500 | $25,000.00 |
| One day registration |  | 50 | 200 | $10,000.00 |
| Industry sponsors (includes registration for 2 people) |  | 10 | 1000 | $10,000.00 |
| Sponsor Donations |  |  |  | $5,000.00 |
| *Less ASU Foundation Fees* |  |  |  | -$900.00 |
| *Less eTouches fees* | |  |  | -$700.00 |
| *Less credit card fees* |  |  |  | -$1,900.00 |
| **REVENUE TOTAL** |  |  |  | **$129,000.00** |
| **PROJECTED EXPENSES** |  |  |  |  |
| **Brochure/Supplies** |  |  |  |  |
| Brochure Design |  |  |  | $1,100.00 |
| Postcard printing 3,500 |  |  |  | $365.00 |
| Mailing/Postage for postcard |  |  |  | $400.00 |
| Name badges | |  |  | $300.00 |
| Copying Handout |  |  |  | $500.00 |
| Signs | |  |  | $1,500.00 |
| Ribbons/Misc. Expenses |  |  |  | $500.00 |
| Lanyards and Bags | |  |  | $2,000.00 |
| Promotional Items @ $8 each x 400 |  |  |  | $3,200.00 |
| **Facilities, Equipment** |  |  |  |  |
| Room Rental Day One |  |  |  | $2,400.00 |
| Room Rental Day Two |  |  |  | $2,400.00 |
| Parking 300 @ $15dayx2 | |  |  | $9,000.00 |
| Sun Devil Stadium Suite/sponsorship | |  |  | $5,000.00 |
| **Catering** | |  |  |  |
| Breakfast, lunch, break, reception, linens |  |  |  | $42,000.00 |
| Reception alcohol |  |  |  | $1,248.00 |
| **Awards** | |  |  |  |
| Speakers Gift | |  |  | $300.00 |
| Sponsors Gift | |  |  | $600.00 |
| Student Poster Session Expenses |  |  |  | $400.00 |
| Website Support | |  |  | $1,000.00 |
| Student Support Recognition Gift |  |  |  | $200.00 |
| Reception Entertainment |  |  |  | $300.00 |
| Administrative Recognition Gift |  |  |  | $2,000.00 |
| Dept. Administrative Support |  |  |  | $5,000.00 |
| Speakers Expenses |  |  |  | $5,000.00 |
| Meeting Expense (parking/catering) |  |  |  | $3,000.00 |
| **EXPENSES TOTAL** |  |  |  | **$90,583.00** |
| Revenue | |  |  | $129,000.00 |
| Expenses | |  |  | $90,583.00 |
| **PROFIT** | |  |  | **$38,417.00** |