

# **HOT NEWS**

**ISSUE 8, 2019** 















# WASWAC HOT NEWS No. 08, August, 2019

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For ISWCR paper submission:

http://www.keaipublishing.com/en/journals/international-soil-

and-water-conservation-research/

WASWAC Website: www.waswac.org



# Information of WASWAC World Conference IV

# Soil and Water Resources Management for Climate Smart Agriculture and Global Food and Livelihood Security

At New Delhi, India, November 5th-9th, 2019



















The conference will be held very soon. It is time to prepare your backpack for your visit!

The temperature in New Delhi during the conference is about 17 -30 degrees Celsius, make sure you have the proper clothes with you together.

## (1) Conference website and contacts

The original website ( <a href="http://soilconservation.org/">http://soilconservation.org/</a>) is no longer in use. The current website: <a href="http://scsi.org.in/">http://scsi.org.in/</a> of Soil Conservation Society of India has been updated with details of the WASWAC World Conference IV. You may visit this page (<a href="http://scsi.org.in/sw index.html">http://scsi.org.in/sw index.html</a>) for the details, including introduction of conference themes, agenda, and technical tours. If you have any questions regarding to the conference, you can contact the following working committee members:

**Prof.(Dr.) Suraj Bhan,** President

Email: <u>bhan suraj1945@yahoo.com</u>, <u>soilcsi@gmail.com</u>

Sh. Jagat Vir Singh, Secretary General

Email: jagat53@yahoo.co.in

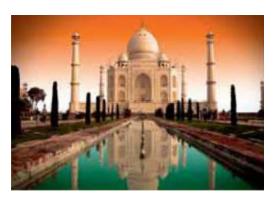
Dr. Sanjay Arora, Convenor & Vice-President

Email: aroraicar@gmail.com, aroracssri@gmail.com



# (2) Post Conference tours

This tour is optional for the delegates. The delegates will be charged an amount of \$100. Visit **Agra Fort**, a Mughal Architectural tradition that represents the assimilation of different cultures. Akbar began the construction of this massive red sandstone fort on the banks of River Yamuna in 1565. It was ready by 1571 though additions were made until the rule of Shah Jahan, Akbar's grandson.



Visit the world famous **Taj Mahal** built by Shah Jahan in 1560 in memory of his queen Mumtaz Mahal to enshrine her mortal remains. This architectural marvel is a perfectly proportioned masterpiece fashioned from white marble that stands testimony to the skill of 20,000 craftsmen brought together

from Persia, Turkey, France and Italy and who took 17 year to complete this 'Monument of Love in Marble'.

Fatehpur Sikri is also nearby and can be visited. Located 40 km from Agra, the deserted city of Fatehpur Sikri was built by Emperor Akbar in 1569, in honor of the great Saint Sheikh Salim Chisti who blessed Akbar and prophesized the birth of three sons to the heirless Emperor.





Visit to **Amber Fort** which is situated in Amber, which is 11 kilometers from Jaipur. Amber, originally, was the capital of the state before Jaipur. It is an old fort, built in 1592 by Raja Man Singh. This fort is also very popularly known as the Amber Palace.



Visit **City Palace**, it is a splendid blend of the Rajasthani and the Mughal style of architecture. The entire complex is divided into numerous courtyards, gardens, and buildings.



# The role of soil on mitigation climate change and food security

José Luis Rubio

Vice President of the World Association of Soil and Water Conservation-WASWAC

Immediate Past President of European Society for Soil Conservation -ESSC

Centro de Investigaciones sobre Desertificación-CIDE (CSIC), Valencia, Spain

The current trend of global warming has a special impact on soil functionalism conditions in the driest areas of the planet by increasing aridification processes and, consequently, desertification. Conversely, soil degradation affects important parameters of climate regulation and the atmospheric chemical composition. Among others: changes in albedo, radiative forcing, soil moisture, surface roughness, evapotranspiration, emission and retention of greenhouse gases (carbon dioxide, methane, nitrous oxide), changes in the condensation surfaces and the emission of aerosols and dust particles. Probably one of the most serious consequences of the global warming trend is the impact on the processes of soil degradation-desertification of dry areas of the planet and, in turn, the feedback of desertification processes by increasing the tendency of climate change (Rubio, 2007). Slowly there is a growing perception that soil can play a more significant role that the consideration received to date. In fact, soils are the second largest active deposit of carbon after the oceans and could act as a sink or as a source of carbon. That is, could be part of the solution or could aggravate the problem. In this sense it is considered that the release of soil C is threatening to undermine all the costly efforts in reducing emissions from industry, cities and transport (EC,



JRC,2016). Specifically, the land sector represents almost 25% of total global emissions and the emissions can be reduced by proven and effective soil conservation practices and sustainable land management measures. A large proportion of soil productivity and the mitigation potential of soil arise from the enhancement of the organic/biological component, which has strong synergies with sustainable agriculture and reduces vulnerability to climate change. In the Mediterranean and other drylands, a perverse spiral can not only affect the stability and functionalism of the natural environment, but can also involve environmental security problems (food security, forced migrations, water scarcity, forest fires) and important socioeconomic consequences after the disruption of the buffering role of the soil facing extreme climatic events (droughts, heat waves, desiccant winds, torrential rains, floods, landslides and collapse of hillsides). These interactions are receiving increasing attention after some initial work (Williams and Balling, 1996) highlighting the need to increase scientific knowledge about the impact of different climatic factors on different processes of soil degradation and the regulatory capacity of soil on the global warming trend (Sivakumar and Stefanski, 2007). The main conclusion is obvious: protecting and conserving the soil will fight against the threat of land degradation and desertification. In addition, and as a consequence, it contributes to the prevention and mitigation of climate change. Both issues are two environmental and socio-economic priorities that currently require a great concertation effort at a global scale.

# WASWAC secretary-general attended the 9th International Congress of European Society for Soil Conservation (ESSC)

The 9th international congress of ESSC was held at the Agricultural University of Tirana (Albania) from 26 to 28 September 2019. The objective is to present up to date research results, practical examples, and policies, to support the role played by soil resources on human existence and as a source of food and life supporting services. It is hosted by the European Society for Soil Conservation



(ESSC), organized by the Agricultural University of Tirana, and jointly hosted by International Union of Soil Sciences, World Association of Soil and Water Conservation.

The theme of this congress is "Soil's Contribution to People: from Food to Life Supporting Services". More than 70 representatives from 14 countries and regions attended the meeting. Experts from Spain, Russia, Belgium, Albania and other countries were invited as speaker, discussing and exchanging cutting edge research topic in soil conservation area. There were 4 invited lectures, 28 oral presentations and 48 posters at the meeting.

Secretary-general Prof. Duihu Ning of WASWAC was invited to attend the meeting and made an oral presentation entitled with "Evaluating indices system for ecological benefits of soil and water conservation". He introduced the objectives and methods to build the evaluating indices system, which includes five perspectives: water, soil, meteorology, biology and carbon sequestration.





Prof. Ning making presentation on the 9th International Congress of ESSC

Prof. Ning also communicated with other council members of WASWAC, including Prof. Carmelo Dazzi from Italy (President of the European Society of Soil Conservation), Prof. José Luis Rubio (Vice president of WASWAC), Prof. Ildefonso Pla Sentis from Spain, and Prof. Mike Fullen from the U.K. They exchanged ideas about the arrangements of the upcoming WASWAC World Conference IV in India, nomination of some awards of WASWAC, nomination for new council member and recent work of the WAWAC secretary.

The last day the representatives visited the Center for Agro-Technology Transfer, QTTB, which



belongs to the Ministry of agriculture and rural development of Albania, which focuses on helping Albanian farmers implement sustainable technology extension in crop, water, soil and livestock management. The center is also responsible for the national soil survey of Albania and carries out regular soil sampling and testing on a scale of 1:10,000. By the end of 2018, the center had surveyed about 300,000 hectares of land and completed the analysis of the chemical and physical properties of all soil samples. During the field visit, the representatives conducted in-depth on-site discussions on the formation of local soil and land use mode, focusing on the development process of typical soil profile, centering on the theme of soil sustainable use and soil conservation.





Field trip to investigate the soil conservation in Albania

# Contents of the International Soil and Water Conservation Research, Volume 7, No.4

# C. Dazzi, G. Lo Papa

Soil genetic erosion: New conceptual developments in soil security <a href="https://www.sciencedirect.com/science/article/pii/S2095633919301790">https://www.sciencedirect.com/science/article/pii/S2095633919301790</a>

# A. Almagro, T.C. Thomé, C.B. Colman, R.B. Pereira, J. Marcato Junior, D.B.B. Rodrigues, P.T.S. Oliveira

Improving cover and management factor (C-factor) estimation using remote sensing approaches for tropical regions

https://www.sciencedirect.com/science/article/pii/S2095633919301832

A.E. Rahma, D.N. Warrington, T. Lei



Efficacy of wheat straw mulching in reducing soil and water losses from three typical soils of the Loess Plateau, China

https://www.sciencedirect.com/science/article/pii/S2095633919301819

# A. Ansari, M.H. Golabi

Using Ecosystem Service Modeler (ESM) for Ecological Quality, rarity and Risk Assessment of the wild goat habitat, in the Haftad-Gholleh protected area

https://www.sciencedirect.com/science/article/pii/S2095633919301820

# M. Sileshi, R. Kadigi, K. Mutabazi, S. Sieber

Determinants for adoption of physical soil and water conservation measures by smallholder farmers in Ethiopia

https://www.sciencedirect.com/science/article/pii/S2095633919301807

# C. Van Huynh, C.T. van Scheltinga , T.H. Pham , N.Q. Duong , P.T. Tran , L.H.K. Nguyen , T.G. Pham, N.B. Nguyen, J. Timmerman

Drought and conflicts at the local level: Establishing a water sharing mechanism for the summer-autumn rice production in Central Vietnam

http://www.sciencedirect.com/science/article/pii/S2095633919300103

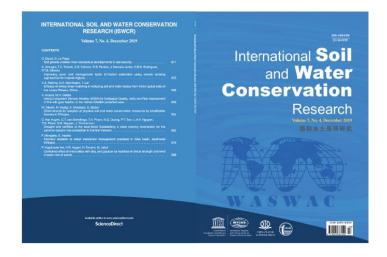
### F. Mengistu, E. Assefa

Farmers' decision to adopt watershed management practices in Gibe basin, southwest Ethiopia <a href="http://www.sciencedirect.com/science/article/pii/S2095633919301844">http://www.sciencedirect.com/science/article/pii/S2095633919301844</a>

### F. Naghizade Asl, H.R. Asgari, H. Emami, M. Jafari

Combined effect of micro silica with clay, and gypsum as mulches on shear strength and wind erosion rate of sands

http://www.sciencedirect.com/science/article/pii/S2095633919300115





# Managing stormwater and stream restoration projects together

By Susan V. Fisk

Both stormwater control and stream restoration are proven ways to reduce erosion along water channels. Often, though, each method is managed by a different urban land-management department, measuring different success values. Efforts are rarely coordinated due to funding and other constraints.

Rod Lammers and his colleagues at the University of Georgia looked at some computerized models to see if coordinating these land management practices with common goals might have a greater positive impact on erosion. The good news? It does.

First, let's take a look at why stormwater management systems are necessary. In nature, precipitation falls onto forests, prairies and other soil-based areas. The water is soaked into the soil, down into the water table, and out into water bodies. Eventually, through evaporation, that water gets back into the atmosphere – until the next precipitation event.

In cities, though, pavement, rooftops, and other structures break the water cycle. City managers and engineers develop stormwater management systems to collect and move water in long tunnels, under buildings, and out to waterways. The more impermeable structures and the larger the area, the more complex the system must be. No matter the system, the water must go somewhere. After all, we don't want it in our basement or parking garage.

Because this stormwater hasn't been able to take advantage of soils' natural ability to clean water, the water can be filled with sediment, and undesirable nutrients. These can take a toll on the stream habitats and harm sensitive ecosystems downstream. In addition, the larger runoff volumes and higher and more frequent peak flows can lead to stream bank erosion. The UGA study only looked at sediments and nutrients coming from the soil eroded in the channels.



One of the stream restoration study sites in Colorado. Note the trees lining the sides of the stream to prevent erosion. Credit: Rod

Lammers

Lammers and his team looked at newer stormwater management approaches, called green infrastructure. These types of structures attempt to allow more water to soak into the soil like a natural system. "We are essentially trying to 'restore' the city to a more natural water cycle," says Lammers.

Each combination of stormwater controls and restoration projects results in its own improvements. However, "piecemeal approaches to stormwater management and stream restoration miss synergistic benefits," says Lammers. "They make restoration projects more prone to failure, wasting valuable resources for pollutant reduction."



Rain gardens are an effective "green infrastructure" measure to allow water to soak into the ground, instead of going down into the drain. Credit: Rod Lammers



Stormwater management programs often focus on peak flow rates of large, less frequent storms. They also attempt to removed suspended solids, as well and nitrogen and phosphorus.

Lammers' team developed computerized models to predict the effects of three different stream restoration scenarios and three different stormwater treatment scenarios. Thus, there were scenarios with a combination of restoration and treatment techniques. Such an "experiment" in the field would take a long time and involve a lot of expense.

"Computer modeling is a powerful tool. We can test the relative success of different management approaches, over years or even decades," says Lammers. "These results can then be used by agencies to help with their planning. Of course, modeling has its limitations. Monitoring the actual performance of stormwater practices and stream restoration is essential. They also have to adapt management approaches based on observed successes and failures."

"Our results suggest that watershed-scale implementation of stormwater controls that reduce runoff volume is essential," says Lammers. "The controls need to address a spectrum of storm sizes. This is a more effective approach for reducing channel erosion than stream restoration. Aggressive, early implementation may have resulted in even less pollution by avoiding erosion early on. Much like investing early in life leads to greater financial returns, early implementation of stormwater controls and restoration can result in greater water quality and channel stability benefits."

"Stream restoration can complement effective stormwater treatment to reduce erosion and pollutant loading," says Lammers. "However, these approaches should be coordinated to achieve the best results. In addition, stormwater controls have a much greater potential to reduce stream erosion than channel restoration. Cities need to address the root cause of erosion – the altered urban water cycle. That is more effective than only treating the symptoms by stabilizing the channel itself."



An aerial view of the study site in Colorado. Credit: THK Associates

Since this study was done in Colorado, future research could be done to apply similar approaches in different climates. Different rainfall patterns might result in different effectiveness of stormwater controls. Also, looking at different restoration strategies, like floodplain reconnection to reduce the velocity and erosive power of floods, would be interesting. Similarly, it would be useful to compare different stormwater control strategies, to see which perform best in different scenarios.

Source: <a href="https://www.soils.org/discover-soils/story/managing-stormwater-and-stream-restoration-projects-together">https://www.soils.org/discover-soils/story/managing-stormwater-and-stream-restoration-projects-together</a>

# Participate the World Soil Day Event



Erosion is putting our soils in danger. Due to climate change and unsustainable management practices, we are witnessing an alarming decline in fertile soils, which is forecast to continue and make them progressively sterile and ever more prone to drought, desertification and floods.



On World Soil Day - 5 December 2019 - focus your attention on being part of the solution... Small actions can have a significant impact on the health of our soils for Zero Hunger!

# Event 1: Be part of the story: Pin your event on the map



Join the WSD campaign by registering your event on the global map.

Do not forget to share with us your successes by sending us photos, videos, media articles of your event, which will be uploaded and shared on our social channels and website.

Details: <a href="http://www.fao.org/world-soil-day/worldwide-events/add-events/en/">http://www.fao.org/world-soil-day/worldwide-events/add-events/en/</a>

**Event 2: Greening the future photo challenge** 

Cover the soil and #StopSoilErosion in 5 easy steps:

- 1. Print out the pledge card;
- 2. Pop a native seed or seedling in the soil;
- 3. Take a photo holding the pledge card;
- 4. Share it on social media #StopSoilErosion #WorldSoilDay;
- 5. Send us your photo with a short description of your action.

Details: <a href="http://www.fao.org/world-soil-day/challenge/en/">http://www.fao.org/world-soil-day/challenge/en/</a>

### **Event 3: Download the communication kit**

Are you planning to have an event on soils for World Soil Day or to spread the word on social media? Use and share our key messages, infographics, action cards, postcards and videos to raise awareness





on soil erosion. Discover our posters, web banners and T-Shirts in different languages...Our material is yours!

Check if the material is available in your language on the relevant webpage. If not, contact us!

Details: <a href="http://www.fao.org/world-soil-day/campaign-materials/en/">http://www.fao.org/world-soil-day/campaign-materials/en/</a>

### **Event 4: WSD logo translation campaign**

WSD logo is available in already 85 local languages! if you cannot find yours, send us the translation and the communication team will prepare a high-quality logo version, which will be shared on the website!

### Details:

http://newsletters.fao.org/c/13Kzt9J3OYvUZUHjDiPYnNCV



# **Upcoming meeting: 2019 ASA-CSSA-SSSA International Annual Meeting "Embracing the Digital Environment"**

The American Society of Agronomy, the Crop Science Society of America, and the Soil Science Society of America will host approximately 4,000 scientists, professionals, educators, and students at the 2019 International Annual Meeting, "Embracing the Digital Environment," on November 10-13, 2019, in San Antonio, Texas.

This premier scientific meeting provides unlimited networking opportunities, scientific abstracts, oral and poster sessions, a robust exhibit hall, technical workshops, and professional and destination



tours. Plus, there's a career center, graduate and undergraduate programs, distinguished lecturers, awards, continuing education units (CEU's), prizes, and more!

Register here: <a href="https://www.acsmeetings.org/login/links/291">https://www.acsmeetings.org/login/links/291</a>

Or submit the *Registration Form* (PDF)

By Email: meetings@sciencesocieties.org

By Fax: 608-273-2021

By Mail: ASA, CSSA & SSSA

Attn: AM Meeting Registrar

5585 Guilford Rd.

Madison, WI 53711

Registration Questions: meetings@sciencesocieties.org



# **Annual Meeting News**

- There's still time to Register!
- Reserve your hotel room ASAP as hotels within walking distance are filling quickly
- View the 2019 Online Program
- Follow the Meeting, and win prizes, via #ACSmtg, sponsored by Soilmoisture
- New this year: Texan-Themed Closing Party instead of Closing Keynote. Join us Wednesday,
   November 13, 4:30-6:00pm in the unique LDR room & Grotto at the Henry B. González
   Convention Center for networking and Texas-style fun!
  - Food including a Chili Tasting Bar, House Smoked Beef Brisket Carving Station, Slider
     Bar, and Chocolate Bar
  - Mariachi Band
  - Ballet Folklorico Dancers-be sure to ask to take your photo with them and use
     #ACSmtg to post it to social media!
  - Faux Straw Cowboy Hat Steaming Station for the first 100 attendees



CSSA and SSSA Society-Wide Student Competition winners announced!

# **2019 Opening Keynote**



**Joe Cornelius** 

Director

Global Development at Bill & Melinda Gates Foundation

"Remaining Awake Through A Great Revolution," Ag Relevance

# **2019 PLENARY SPEAKERS**



**Alex McBratney** 

Director

Sydney Institute of Agriculture

"Digital Soil Science and Beyond"



Kim Kidwell

Dean, College of ACES

University of Illinois at Urbana-Champaign

"Finding Voice and Purpose as a Scientist in the Age of Digital Agriculture"



**Cynthia Parr** 

**Technical Information Specialist** 

USDA ARS National Agricultural Library

"The CGIAR Big Data Platform and the NAL Ag Data Commons: Model Infrastructures for Advancing Research on Complex Problems"

# Jointly with:





### **Andrew Jarvis**

Director of the Decision and Policy Analysis Area

Center for Tropical Agriculture

"The CGIAR Big Data Platform and the NAL Ag Data Commons: Model Infrastructures for Advancing Research on Complex Problems"

# PhD position in 'Towards a reliable European assessment of soil biodiversity status under current land use changes'

Description: Collaborative Doctoral Partnership JRC - University of VIGO (ES)

Within the CDP framework we are looking for a PhD candidate willing to embrace a multidisciplinary approach by gaining ecological/taxonomical knowledge at the University of Vigo and the modelling/biogeography capabilities within the JRC. Presently, no country has legislation that specifically protects soil biodiversity, which may be an issue considering that global food security is highly dependent on soil organisms. Protecting soils remain an important objective for the European Union (EU) but this goal cannot be achieved without considering soil biodiversity fully.

The ultimate aim of this PhD will be to provide policy tools aiming at developing actions to protect soil biodiversity at European level. So far, soil biodiversity has been neglected in environmental assessments despite its crucial roles in offering several contributions to people. Therefore, conservation measures would be necessary.

In the first phase, the PhD candidate will expand our current knowledge on soil genetic diversity beyond soil microorganisms to mesofauna and macrofauna groups in European agricultural soils. As part of LUCAS Soil survey (https://esdac.jrc.ec.europa.eu/projects/lucas), the JRC is analyzing soil microbial biodiversity in 1,000 locations across EU using DNA metabarcoding techniques. Therefore, the first research aim will be to obtain direct measurements of the effects of land-use changes on



soil fauna diversity at plot-scale and landscape levels (as they might not be the same). New soil fauna data will be combined with microbial data to get a better overview of the entire soil food web. This will provide a greater understanding of these processes and hence, contribute to better comprehend the ecosystem resilience. In a second phase during her/his stay in UVIGO, the PhD candidate will interpret findings on soil biodiversity in relation to soil quality, biological habitat formation and ecosystem services. At a final stage, the PhD candidate will integrate all gathered information propose management practices and policy tools that promote and preserve soil organisms, their functions and related services.

### **Profile**

- You have (or are near completion of) a Master in Life Sciences, Soil Science, Agricultural Sciences,
   Environmental Sciences, Soil Ecology (or a related field) issued by a HEI from any EU state
   member. Candidates must have completed 300 ECTS between undergraduate and
   postgraduate studies.
- You have a strong interest in soils, soil biodiversity and soil functions and ecosystem services,
   and a demonstrable experience in these topics.
- Experience in relevant laboratory and fieldwork and a basic knowledge on soil nutrient transformations, plant-soil interactions, and soil fauna is a major asset.
- Experience in molecular techniques (DNA sequencing) and bioinformatics is an advantage
- A flair for planning and statistical treatment of data is also highly relevant.
- You work proactively and independently and in a team.
- You have a very good knowledge of English, both spoken and written.
- Relevant publications in peer review journals should be highlighted.
- You are highly motivated, enthusiastic, ambitious and result-oriented.

# Offer

• We offer a four-year PhD position in collaboration with the Joint Research Centre (JRC) of the European Commission.

The PhD student will execute the research work at the Joint Research Centre (JRC) in Ispra, Italy,

for a period of up to 24 months.

We offer a competitive fellowship. While at the JRC in Ispra, you will get a contract as a Grant

Holder 20 (https://ec.europa.eu/jrc/sites/jrcsh/files/jrc grantholder rules.pdf).

Apply here: https://secretaria.uvigo.gal/uv/web/convocatoria/public/show/398

Place: Vigo, Spain

Deadline: Friday, November 15, 2019

STUDENT'S FORUM OF WORLD ASOCCIATION FOR SOIL

AND WATER CONSERVATION – SF WASWAC

By Miodrag Zlatic

In October 31<sup>th</sup> 2019 at the Faculty of Forestry of Belgrade University was established/reformed

Student's Forum of World Association of Soil and Water Conservation. Support for this initiative was

given by Prof. Dr. Miodrag Zlatic, president of WASWAC Organizing Committee, as well as by Tijana

Vulević – assistant professor at the Faculty of Forestry, Katarina Lazarević and Aleksandar

Baumgertel- assistants at the same Faculty, who were present at this establishing meeting. Official

support is also given by Prof. Ratko Ristić, dean of the Faculty of Forestry and Prof. Nada Dragović,

chief of the Department for ecological engineering in soil and water resources protection. This

initiative was very well evaluated and accepted by both sides: professional (professors) and students.

At this moment Forum has 20 students.

Main office is at the Faculty of Forestry of Belgrade University (Tel: +381 11 3053 901/905 and Fax:

+ 381 11 2545 485). Web page is still in establishing. At the reestablishing meeting there were elected:

PRESIDENT OF THE FORUM: Petar Nešković, master student

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- DEPUTY PRESIDENT: Stefan Miletić, master student
- SECRETARY: Angelina Novaković, master student

Forum is organized on decentralization principal (similar to DP programme of WASWAC). This establishment is still in running process. For this propose statute—is prepared with the statements of the name, place, aims, activities, registration of new members, rights and obligations, membership, Assembly, Council, Supervisory Board, procedure of meetings, etc.

### Aims of the Forum are:

- advanced trainings in SWC with the field and laboratory work/practice;
- promoting SWC approaches; raising SLM awareness in theory as well as in practice,
- disseminating WASWAC idea with students,
- strengthening of membership,
- helping/supporting in establishing similar forums in Balkans and strengthening their network in this region and wider,
- organizing students meetings/seminars,
- excursions,
- publishing brochures of own work.

To realize this aims members of the Forum will be involved in activities and research of Department for Erosion Control, as well as in possible WASWAC activities, meaning on IYFSWC.

President is representing Forum and Deputy president can do the same in the case of president's absence. Secretary is engaged with administration of meetings, evidency, membership, official letters etc. Treasurer is responsible for financy. Other organs of Forum are Assembley, Council and Supervisory Board. In Assembley are all members and this Organ establishes work plan and programme, adopt statute, etc. Council is responsible for carrying out the aims of Forum. Supervisory Board is taking care of whole Forum work in accordance with statute and WASWAC aims. Supervisory Board is consisted by four members:

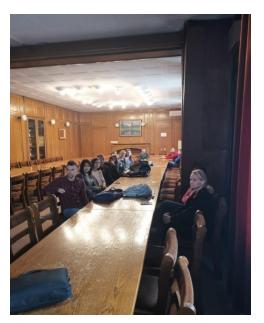
- 1. Miodrag Zlatić, president of WASWAC Organising Committee
- 2. Tijana Vulević, assistant professor



- 3. Katarina Lazarević, assistant
- 4. Aleksandar Baumgertel, assistant

Assembly meetings has to be organized 4 times annually at least.







Photos of students forum of WASWAC