

## REPORT OF THE COMMISSION ON COASTAL SYSTEMS: 2021

### A. Membership

The Officers and Steering Committee of the Commission on Coastal Systems are:

#### **Chair/ Président**

**Prof. Colin Woodroffe**

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#### **Secretary/Secrétaire, Editor of Newsletter**

**Dr. Margarita Stancheva**

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#### **Vice-Chair**

**Dr. David R. Green**

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#### ***Steering Committee members***

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**Prof. Irene Delgado-Fernandez** [appointed in 2021]

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**Prof. Niki Evelpidou** [appointed in 2021]

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Prof. **Paul Liu** [appointed 2021]  
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### *Honorary members*

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b. Number of Commission members **in total (543) and by country** at 31 December 2021.

ALBANIA	1	GABON	2	PERU	1
ALGERIA	2	GEORGIA	2	PHILLIPINES	2
ARGENTINA	5	GERMANY	21	POLAND	4
AUSTRALIA	12	GREECE	6	PORTUGAL	16
AZERBAIJAN	1	HONG KONG	2	ROMANIA	10
BANGLADESH	2	INDIA	9	RUSSIA	7
BELGIUM	27	ICELAND	1	SENEGAL	1
BENIN	1	INDONESIA	1	SINGAPORE	1
BRAZIL	21	IRAN	1	SOUTH AFRICA	7

BULGARIA	4	IRELAND	10	SPAIN	20
CANADA	18	ISRAEL	3	SURINAM	1
CHILE	2	ITALY	16	SWEDEN	3
CHINA	11	JAPAN	5	SWITZERLAND	2
COLOMBIA	2	KOREA	2	TAIWAN	5
COTE D'IVOIRE	3	LATVIA	1	THE NETHERLANDS	14
CUBA	1	MALAYSIA	1	TOGO	1
DENMARK	2	MEXICO	1	TUNISIA	1
ECUADOR	1	MORROCO	3	TURKEY	7
EGYPT	1	NEW ZEALAND	10	UKRAINE	2
ESTONIA	5	MOZAMBIQUE	1	UNITED KINGDOM	31
FINLAND	4	NAMIBIA	1	U S A	94
FRANCE	83	NIGERIA	4	URUGUAY	1
FRENCH POLYNESIA	1	NORWAY	3	VIETNAM	1

## B. Meetings

The following meetings were organised, or sponsored, by the Commission on Coastal Systems in 2021 with summary information. Plans for 2022 are also outlined.

### **APRIL 19-30, 2021. VIENNA, AUSTRIA. EUROPEAN GEOSCIENCES UNION (vEGU2021)**

A special coastal session, held virtually, at EGU2021 was sponsored by the Commission on Coastal Systems:

**GM6.6/NH5 Session: ‘Coastal Zone Geomorphological Interactions: Natural versus Human-Induced Driving Factors’**, convened by Hannes Tönnisson, Giorgio Anfuso, Andreas Baas, Guillaume Brunier and Margarita Stancheva,

This session was successfully conducted for the thirteenth year in succession at the EGU General Assembly (this year in the online format). The program of the vPICO session was chaired by Dr. Hannes Tönnisson (Estonia) and a detailed list of presentations can be viewed here: <https://meetingorganizer.copernicus.org/EGU21/session/40296#>.

Contributions to this session were focused on wide range of topics, including the mechanisms triggering coastal flow slides, vulnerability of coastal deltas, trends in shoreline variability driven by anthropogenic factors, coastal dunes as natural coastal protection measures.

The vEGU2021 GM6.6NH5 Session was held with 14 abstract submissions. 13 presentations were introduced in one vPICO session. Each presenter had the opportunity to show one slide and carry out two-minute talk. vPICO session was followed by nearly 45-minute chat session, there were around 75 participants.

### **AUGUST 16 – 20, 2021, 34<sup>th</sup> INTERNATIONAL GEOGRAPHICAL CONGRESS (IGC) “GEOGRAPHY: BRIDGING THE CONTINENTS”, ISTANBUL, TURKEY**

A special coastal session, held virtually, at IGC2021 was sponsored by the Commission on Coastal Systems:

**Sustaining coastal and marine environments in the Anthropocene**, convened by Colin Woodroffe and Margarita Stancheva.

The session, held in virtual mode online, commenced with a keynote presentation by Jon French on a new framework within which to foster more resilience-based coastal management. Subsequent talks over three sessions covered issues at the land-sea interface, incorporating both natural processes and the impact of human activities, coastal sediment compartments and sediment delivery to tropical coasts, trajectories of land reclamation, environmental conflicts

that have hampered the establishment of coastal parks, and criteria and targets for coastal ecological quality assessment. A special issue of the *Journal of Coastal Conservation* is being produced based on papers presented at the congress.

## **SEPTEMBER 15 – 16, 2021 CoastGIS NOVIA UNIVERSITY, RASEBORG, FINLAND**

CoastGIS 2021 – held virtually for the first time since it first began in 1995 – with the theme, **Sustainable Coastal Planning in a Changing World**, took place on the 15<sup>th</sup> and 16<sup>th</sup> September 2021 in Raseborg in Finland, at the Novia University of Applied Sciences. The overall aim of this conference was to examine the role of GIS and the related technologies of remote sensing and mapping to coastal management. In light of the pandemic and the visible global impacts of climate change in the last few years the theme seemed very appropriate. As always there was a very good programme covering a range of themes including: coastal mapping and data, coastal habitat, conservation, remote sensing, UAVs in coastal monitoring and mapping, spatial data, Big Data, coastal society and support, marine spatial planning, tools for coastal management, and the impacts of climate change on coastal management. The conference presentations were accompanied by Keynote talks, several workshops and a number of scientific posters. A Special Issue in the *Journal of Coastal Conservation, Planning and Management*, based on the conference proceedings will be published in the coming year, followed by a book edited by David R Green.

## **CONFERENCE SESSIONS PROPOSED IN 2022**

### **APRIL 3-8, 2022. EUROPEAN GEOSCIENCES UNION GENERAL ASSEMBLY – VIENNA, AUSTRIA**

CCS will convene two sessions at EGU2022; this will be a live and virtual congress.

**Coastal morphodynamics: nearshore, beach and dunes**, convened by Irene Delgado-Fernandez, Emilia Guisado-Pintado and Derek Jackson

**Coastal Zone Geomorphological Interactions: Natural versus Human-Induced Driving Factors**, convened by Margarita Stancheva, Andreas Baas, Hannes Tönnisson, Guillaume Brunier and Giorgio Anfuso

### **JULY 18-22, 2022 INTERNATIONAL GEOGRAPHIC UNION CENTENNIAL CONGRESS – PARIS, FRANCE**

CCS will convene two sessions at UGI2022; this will be a live and virtual congress.

**Coasts' Futures: The Challenge of Coastal Resilience in the Face of Global Change**, convened by Ywenn De La Torre and Virginie Duvat

**Coastal resources and unsustainability: addressing underlying issues to strengthen resource governance**, convened by Ritika Prasad and Bratati De

**Coastal Tourism, Heritage and Nature Conservation in the Anthropocene**, convened by Vincent Andreu-Boussut and Céline Chadenas

## NOVEMBER - COASTAL HAZARDS IN AFRICA

The third conference on this theme is proposed to take place in Tunisia November 11 to 13, 2022, as advised by Abdelmounim El M'rini.

### C. Networking and Communications

The CCS has upgraded its new website - <http://igu-coast.org/> in 2021, and maintained its Twitter account. It sustained networking and communication through its Newsletter, published twice a year, as well as through special sessions at meetings.

### D. Publications

#### a. Newsletters, special journal issues, and books published or anticipated during 2021

Two Newsletters have been published in 2021; numbers 84 and 85 in January and July respectively. The next Newsletter will appear in January 2022.

The following special issue was completed in 2021

**Estuaries and Coastal Wetlands of the Southern Hemisphere** – a virtual special issue of *Estuarine Coastal and Shelf Science* – appeared in 2021. Guest editors, Janine Adams, Debora de Freitas, Kerry Lee Rogers, and Colin Woodroffe. This comprises 21 papers based on a session convened by the Commission on Coastal Systems at ECSA57 in 2018.

The following special issues are in production;

A special issue on **Sustaining coastal and marine environments in the Anthropocene is in preparation** for the *Journal of Coastal Conservation*, arising from the CCS session at the IGC. Guest editors – Colin Woodroffe and Margarita Stancheva

A special issue on **Coastal Hazards in Africa** is in preparation for the *Journal of African Earth Sciences*. Guest editor - Abdelmounim El M'rini, Driss Nachite and Mohamed Maanan

A second special issue on **Coastal Hazards in Africa: processes, vulnerability and management**, arising from the second conference, is in preparation for the journal *Estuarine, Coastal and Shelf Science*, Guest editor – Errol Wiles

A special issue on **Sustainable Coastal Planning in a Changing World**, is planned, collating papers from CoastGIS 2021, in the *Journal of Coastal Conservation, Planning and Management*. Guest editor - David R Green

The following special issues are calling for papers:

A special issue on **Applications of Structure-from-Motion Photogrammetry in Coastal and Marine Studies** for the journal *Geosciences*. Guest editors – Rafael Carvalho, Javier Leon and Luis Conti

A special issue on **Coastal Systems: Monitoring, Protection and Adaptation Approaches** for the *Journal of Marine Science and Engineering*. Guest editors – Niki Evelpidou, Anna Karkani and Miltiadis Polidorou

#### **E. Archival Contributions**

Copies of Newsletters are archived with IGU and available on our CCS website.

#### **F. IGU Funds**

Funds from IGU have been used to contribute to support registration for participants in the virtual International Geographical Congress, and to subscribe to upkeep of the new website.

**Colin Woodroffe**, Chair and **Margarita Stancheva**, Secretary