

## FOREWORD

Dear readers, dear authors

The current issue of the journal *Acta hydrotechnica* is dedicated to Professor Mitja Brilly on the occasion of his 70th Birthday. As a longtime professor at the Faculty of Civil and Geodetic Engineering, University of Ljubljana, professor Brilly largely contributed to the advancement of hydrological science and profession in Slovenia as well as in the international arena with his dedication to research and professional work.

Prof. Mitja Brilly began his academic career as a researcher at Jaroslav Černi Institute for the Development of Water Resources, where he was employed from 1970 to 1977. He began working at the Faculty of Architecture, Civil Engineering and Geodesy (FAGG) in Ljubljana already in the autumn of 1976 as an assistant for the courses Watercourse regulations and Meliorations. He officially started to work at FAGG in February 1977, in the Laboratory of fluid mechanics. Since then he has taught courses in the field of hydraulic engineering, e.g. Hydrology I, Hydrology II, Watercourse regulations, Meliorations, Water management and Groundwater. When Prof. Marko Breznik retired in 1993, professor Brilly was left alone at the Chair of Hydrology and Hydraulic Engineering. After 1993, the chair progressed steadily and expanded its activities. Members of the Chair have so far supervised 15 young researchers and bred eleven PhDs in the area of hydrology and hydraulic engineering.

In the frame of research, the Chair is connected with three other teaching and research units of the faculty in the Research Institute for Geo and Hydro Threats (RIGHT), established at the end of 2014. Today Chair of Hydrology and Hydraulic Engineering together with the Institute RIGHT employs 17 researchers (11 full-time), of whom 14 have academic titles and three are young researchers or PhD students.

From the scientific point of view, the Chair has achieved high-visibility results, demonstrated in numerous scientific publications in the highest ranking national and international scientific journals in the area of water resources and civil engineering. An overview of some research achievements of the Chair in the last two decades is presented in the final paper of the current issue of *Acta hydrotechnica* entitled "Review of hydrological studies contributing to the advancement of hydrological sciences in Slovenia ". For international contribution to this issue of *Acta hydrotechnica* we asked some internationally recognized researchers in the field of hydrology, with whom we have had excellent collaboration in the past, to write their personal views on unsolved issues in hydrology of the 21st century. At this opportunity we would like to thank them again for their contributions to this issue.

Professor Mitja Brilly has led or has been involved in numerous research and development projects and studies in the field of hydrology and water resources in Slovenia and in the international arena. Among other things, he was one of the promoters of introducing a new research field Water resources in Slovenia 20 years ago. He has been heading the Slovenian National Committee of the IHP UNESCO Programme for many years. Professor Brilly was the main initiator of the establishment of the UNESCO Chair on Water-related Disaster Risk Reduction, established this year (2016) at the University of Ljubljana. Additionally, Professor Brilly is currently vice president of the International Bureau of the IHP UNESCO Group II (Central and Eastern Europe). He participated at the formation of the Slovenian Association of Geodesy and Geophysics in 1994 and was the president of the association for several years. Furthermore, he was involved in the research and preparation for the establishment of International Commission for the Protection of the Danube River in which he constantly actively involved as a representative of Slovenia. He is also one of the founders of the

Euromediterranean Network of Experimental and Representative Basins (ERB), which are also in Slovenia the basis of scientific research and pedagogical work of the Chair members.

We wish Professor Brilly further successful activities for the benefit of hydrological science.

Mojca Šraj and Matjaž Mikoš, in the name of the Chair of Hydrology and Hydraulic Engineering

## UVODNIK

Spoštovani bralci in avtorji

Redna številka revije Acta hydrotechnica pred vami je posvečena 70-letnici prof. dr. Mitje Brilly-ja, dolgoletnega profesorja Fakultete za gradbeništvo in geodezijo Univerze v Ljubljani, ki je s svojo predanostjo raziskovalnemu in strokovnemu delu v veliki meri pripomogel k razvoju hidrološke znanosti in stroke v Sloveniji in v mednarodnem prostoru.

Prof. dr. Mitja Brilly je začel svojo akademsko pot kot raziskovalec na Vodnogospodarskem inštitutu Jaroslav Černi v Beogradu, kjer je bil zaposlen od leta 1970 do 1977. Že jeseni leta 1976 je začel sodelovati kot asistent pri predmetih Regulacije vodotokov in Melioracije zemljišč na tedanji Fakulteti za arhitekturo, gradbeništvo in geodezijo (FAGG) v Ljubljani, kjer se je februarja 1977 tudi zaposlil, in sicer v Laboratoriju za mehaniko tekočin. Od takrat dalje je predaval predmete s področja splošne hidrotehnike, kot so npr. Hidrologija I, Hidrologija II, Regulacije vodotokov, Melioracije, Vodarstvo in Podzemne vode. Po upokojitvi prof. dr. Marka Breznika leta 1993 je profesor Brilly ostal sam na Katedri za splošno hidrotehniko. Po letu 1993 je katedra stalno napredovala in širila svojo dejavnost. Člani katedre so bili do danes mentorji 15 mladim raziskovalcem in skupaj vzgojili enajst doktorjev znanosti na področju hidrologije in inženirske hidrotehnike.

Katedra se v okviru fakultete raziskovalno povezuje s tremi drugimi pedagoško-raziskovalnimi enotami v konec leta 2014 ustanovljenem Raziskovalnem inštitutu za geo in hidro tveganja (RIGHT). Danes katedra skupaj z inštitutom RIGHT zaposluje 17 raziskovalcev (11 od tega je redno zaposlenih za polni delovni čas), od tega jih ima 14 visokošolske nazive učitelja ali sodelavca, trije pa so mlajši raziskovalci oz. doktorski študentje.

Katedra na znanstvenem področju dosega odmevne rezultate, kar izkazujejo številne znanstvene objave v najodmevnejših domačih in mednarodnih znanstvenih revijah s področij vodnih virov in gradbeništva. Pregled nekaterih raziskovalnih dosežkov katedre v zadnjih dveh desetletjih je predstavljen v zadnjem članku te številke revije Acta hydrotechnica z naslovom »Pregled hidroloških študij z vidika napredka hidrološke znanosti v Sloveniji«. Za mednarodno noto te redne številke smo zaprosili nekaj mednarodno priznanih raziskovalcev na področju hidrologije, s katerimi smo v preteklosti odlično sodelovali, da napišejo svoj osebni pogled na odprta vprašanja hidrologije v 21. stoletju. Za njihove prispevke v tej številki revije se jim posebej zahvaljujemo.

V okviru Katedre za splošno hidrotehniko UL FGG je prof. dr. Mitja Brilly sodeloval ali vodil delo na številnih raziskovalnih, razvojnih in ciljnih raziskovalnih projektih in študijskih nalogah s področja hidrologije in urejanja vodnih režimov v slovenskem in mednarodnem prostoru. Med drugim je bil pred 20 leti eden od predlagateljev uvedbe novega raziskovalnega področja Vodarstvo v Sloveniji. Dolga leta tudi vodi slovenski nacionalni odbor programa za hidrološke raziskave pri Slovenski komisiji za UNESCO. Prof. Brilly je bil tudi glavni pobudnik za ustanovitev Unesco Katedre za zmanjševanje tveganj ob vodnih ujmah, ustanovljene letos (2016) na Univerzi v Ljubljani. Poleg tega je prof. Brilly trenutno podpredsednik mednarodnega Biroja IHP UNESCO skupine II (srednja in

vzhodna Evropa). Sodeloval je pri ustanavljanju Slovenskega združenja za geodezijo in geofiziko leta 1994 in bil več let tudi predsednik združenja. Kot predstavnik Slovenije je sodeloval pri raziskavah in pripravah za ustanovitev meddržavne komisije za urejanje okolja v porečju reke Donave in v njej tudi ves čas aktivno sodeloval. Je eden od ustanoviteljev Euromediteranske mreže eksperimentalnih porečij (ERB), ki so tudi v Sloveniji osnova znanstveno-raziskovalnega in pedagoškega dela članov katedre.

Profesorju Brilly-ju želimo še nadaljnje uspešno delo v dobro hidrološke znanosti.

Mojca Šraj in Matjaž Mikoš v imenu Katedre za splošno hidrotehniko

