



INTERNATIONAL CENTRE FOR HEAT AND MASS TRANSFER

1968 - 2018

Kemo Hanjalić Delft University of Technology, NI

The beginning of West-East scientific communications in HMT (late fifties of the last century)

- Two emerging technologies (space exploration and nuclear energy) frantically pursued both in the West and in the Soviet Union prompted both sides to search for scientific communication;
- Both technologies depended heavily on the understanding and managing heat and mass transfer
- A seminal event: meeting of Robert Maxwell (Pergamon Press) with Carl Gazley (Rand Corp.) and Jim Hartnett visiting Soviet Union in 1958
 - → foundation of a new journal exclusively in heat and mass transfer
- The new journal, IJHMT was born in 1960, with the Editorial Board including E. Brun, A.J. Ede, E. Ekert, U. Grigul J. Hartnett A. V. Luikov,, W. Rohsenow, DB Spalding, N. Zuber,....

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2nd **All Soviet Union Conference on Heat and Mass Transfer, Minsk 1967** Proc. (Edts) C.Gazley, Jr., J.P. Hartnett and E.R.G. Eckert, Rand Corp.



A piece of history, cont.

Two concepts:

- International Heat Transfer Institute in Paris (E.A. Brun and A.V. Luikov)
- International Heat Transfer Centre in Yugoslavia Adriatic
 (J.P. Hartnett, T.F.Irvine, D.B. Spalding)
- "...The *first* meeting of the ICHMT was held on September 16, 1968,... Some of the most prominent names involved in creation of ICHMT:

 E.A. Brun (Paris), E.R.G. Eckert (Minneapolis), U. Grigull (Munich),

 J.P Hartnett (Chicago), T.F, Irvine (New York), S.S. Kutateladze

 (Novosibirsk), A.V. Luikov (Minsk), W.M. Rosenhow (Cambridge, MA),

 D.B. Spalding, (London), M.A. Styrikovich (Moscow), Z. Zarić and

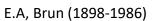
 N. Afgan (Belgrade)"

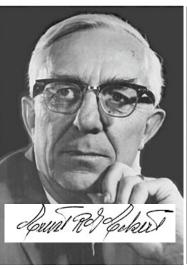
 (From "The Develoment of ICHMT"

by Faruk Arinc, Secretary General of ICHMT)

FOUNDERS OF ICHMT, 1968







E.R.G. Eckert (1904-1994)



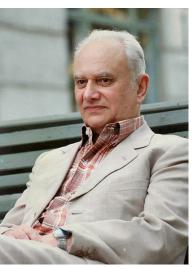
U. Grigull (1912-2003)



J.R. Hartnett (1924-2005)

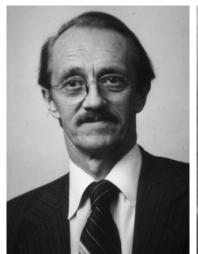


T.F. Irvine (1922-2001)











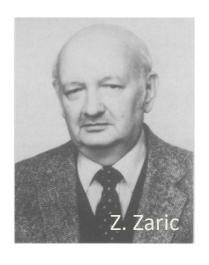
S.S. Kutateladze (1914-1986)

A. Luikov (1910-1974)

W.M. Rohsenhow (1921-2011) D.B. Spalding (1923-2016) M.A. Styrikovich (1902-1995)

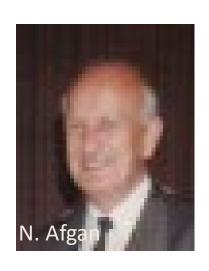
THE FIRST SCIENTIFIC EVENTS, Herceg Novi, Yugoslavia

"Heat and Mass Transfer in Turbulent Boundary Layers" 9-12 Sept 1968 "Heat and Mass Transfer in Separated Flows" 1969



Zoran Zarić, (?-1985) Secretary General (1968-1985),

> Naim Afgan (1930-) Scientific Secretary (1968-1985), Secretary General (1985-1993)



"...On the next day, September 7, 1968, Professor Brun convened the initial meeting of the Scientific Council... On the same day, Professor Afgan chaired a meeting of the Organization Committee attended by A.I. Leontiev (representing M.A Styrikovich, USSR), D.B. Spalding, Z. Zaric and myself. The major business was the selection of "Heat and Mass Transfer in Separated Flows" as the topic for the 1969 conference..."

(From "Origins of the International Centre for Heat and Mass Transfer" by late James P. Hartnett)



Some of the early ICHMT events

Heat and Mass Transfer in Turbulent Boundary Layers

Summer School, Herceg Novi, Yugoslavia 9-12 Sept 1968

Heat and Mass Transfer in Flows with Separated Regions

International Seminar, Herceg Novi, YU, 1-13 Sept 1969

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Heat Transfer in Fires

Summer School, Trogir, YU, 20-24 Aug. 1973

Heat Transfer in Flames

International Seminar, Trogir, YU, 27-31 Aug. 1974

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Turbulent Buoyant Convections

International Seminar, Dubrovnik, YU, 30 Aug-4 Sept. 1976

Summer School "Heat and Mas Transfer in Boundary Layers" The first ICHMT event, Herceg Novi (Yug.-/Montenegro, Sept. 1968) Initiated and coordinated by D.B. Spalding



"Heat and Mas Transfer in Boundary Layers" Sept 1968







International Centre for Heat and Mass Transfer

MISSION

ICHMT provides a unique apolitical forum for the world's leading heat and mass transfer scientists and engineers. Our mission is to pursue excellence and foster the international exchange of science and engineering in all branches of heat and mass transfer through symposia, publications, and promotion of research, education and exchange of personnel for the benefit of people everywhere.



International Centre for Heat and Mass Transfer

Over the past 50 years of continuous operation ICHMT emerged as one of the truly global professional association

- Over 40 Member Institutions from 30 countries worldwide
- Organised over 120 events (conferences, symposia, seminars, forums, schools, courses,... on a great variety of topics)
- Many proceedings and individual (extended) papers published by Begell House Inc. (official publisher of ICHMT)
- ICHMT Digital Library (<u>www.dl.begellhouse.com/ICHMT</u> in 2013: close to 160,000 hits!)
- THERMOPEDIA (<u>www.thermopedia.com</u>)
 Reliable sources for Thermodynamics, Heat Transfer and Fluid Flow

Past Presidents of ICHMT

E.A. Brun Paris, Fr	1968-1972	M. Combernous, Bordeaux, Fr	1994-1998
M.A. Stirikovich Moscow, USSR	1972-1976	R.J. Goldstein, Minneapolis, USA	1998-2002
E.R.G. Eckert, Minneapolis, USA	1976-1982	M. Cumo, Sapienza, Rome	2002-2006
U.Grigull, TU Munich, Ge	1982-1986	G.F. Hewitt, Imp Coll. London	2006-2010
W.M. Rosenhow, MIT, Cambridge MA	1986-1990	G. de Vahl Davis Sydney, Australia	2010-2014
Y. Mori, Tokyo, Japan	1990-1994	K. Hanjalić	2014-2018

ICHMT Awards

Luikov Medal (established in 1979)

(dedicated to A.V. Luikov) for outstanding contributions to the science and art of HMT and international scientific cooperation

ICHMT Fellowship Award (since 1980)

In recognition of administrative or organizational service to ICHMT

Hartnett-Irvine Award (since 2007)

For best paper on HMT at a conference/symposium of ICHMT

William Begell Medal (since 2010)

For the best Keynote Lecture at an ICHMT event

ICHMT Grants (since 2003)

to support young scientists/engineers to attend ICHMT events

The last of the Founding Fathers

lecturing at his last ICHMT event

"Turbulence, Heat and Mass Transfer 8", THMT'15,





A new initiative: coordinating and unifying efforts

