LIGHTWEIGHT STRUCTURES in CIVIL ENGINEERING

- CONTEMPORARY PROBLEMS

INTERNATIONAL COLLOQUIUM Organized by Polish Chapter of

International Association for Shell and Spatial Structures Warsaw, 12-14 September, 2005

XI LSCE - 1995 - 2005 & TEN YEARS OF IASS POLISH CHAPTER



PROFESSOR S.J. MEDWADOWSKI HONORARY MEMBER OF IASS POLISH CHAPTER

After sessions of LSCE 2003 in Rzeszów, at late evening, during short meeting of IASS Polish Chapter, we all were discussing and agreed, that activity of Professor S.J. Medwadowski specially with regard to us - Polish group of IASS members named as Polish Chapter, should be in certain way honoured. The same we discuss in Czestochowa.

So, was coming idea to include Professor Stefan Jerzy Medwadowski, Past-president of IASS, as Honorary Member to our ASS Polish Chapter.

The good moment to give such nomination, are the days, when we celebrate the tenth anniversary of our activity. In this way this ceremony have place in Warsaw at 12 September, 2005. The additional opportunity to do this moment much solemnly is fact, that on our International Colloquium on *Lightweight Structures in Civil Engineering* at 12-14 September, 2005 in Warsaw is arriving actual IASS president – Professor Mamoru Kawaguchi. We hope that this nomination will be given in by His presence.

Moreover, on occasion of XI editions of LSCE conferences and books, and tenth anniversary of LSCE and IASS Polish Chapter, were founded by me 21 commemorative medals. They are destined for peoples, which personally contribute to activity and existence of IASS PC. The copy with number 1 is dedicated for Professor S.J. Medwadowski. The number 2 has name of Professor M. Kawaguchi. The list of owners is given in chapter with Forewords in this book.

On the official question addressed to Professor, whether He can accept both above nominations, was coming positive answer, in the letter quoted below. Many thanks for Professor.

Prof. Dr. Hab. Eng. Jan B.Obrębski

Part of letter from:

Dr. Stefan J. Medwadowski (....) Oakland, (...) USA

(To) Prof. Dr. Jan B. Obrębski Warsaw University of Technology Faculty of Civil Engineering Institute of Structural Mechanics Al. Armii Ludowej 16, p. 144 00-637 Warsaw, POLAND

August 5, 2005

Dear Janek:

Thank you for your very kind letter of July 26th, describing your preparation for the forthcoming conference in Warsaw. It will be, of course, very glad to send to you a Foreword, as per your request. I shell do so in the next few days.

I was very touched by your suggestion that I should become an honorary member of the Polish group of IASS. I accept with great pleasure, and thank you and all the other members for this great honor. Despite you kind works, the success of this group is entirely yours and your colleagues.

As regards the proposed medal I shell be very happy to accept it. I image that sending it by mail would be quite safe.

Unfortunately, Betty and I will not be able to attend, much to our regret. The time does not seem propitious for travel, and I have no idea when and how we might meet again. However, we think of you often and wish (..) all the best.

(..)
With best regards,
Cordially.



Fig. 1 Professor S.J. Medwadowski during opening ceremony of LSCE'95 in *Mala Aula* in main building of Warsaw University of Technology

1. BRIEF BIOGRAPHICAL DATA

The information listed below were collected from authorised, C.V. delivered by Professor S.J.Medwadowski by fax at 21 February, 1996 written down during interview in Nagoya and from Ref 1.

Born at 1924 in Poland.

Education: Warsaw University of Technology (Politechnika Warszawska) 1943-44, Universita di Roma, 1945-46, Polish University College – University of London, 1946-49, Diploma of Engineer 1950, University of California Berkeley, 1954-56, Ph.D. 1956.

Military Service: Member AK, participated in the Warsaw Uprising 1944, com. 1st platoon, com. *Genowefa*, bat. *Harnaś*.

Professional Practice: Consulting Engineer, San Francisco, since 1958. Designer of the numerous structures projects, including buildings and bridges. Many of the projects received awards for excellence of designing.

Teaching: For many years served on the Faculty of Civil Engineering on University of California Brekeley, 1958-89.

Research: Published numerous papers on theory of plates, theory of shells, analysis and design of structures and aesthetics of structures in refereed journals.

Books: Co-editor of *Concrete Thin Shells*, published by the ACI in 1971, and *Stability of Concrete Shells*, published by the ACI in 1980.

Professional Associations: Chairman of Concrete Shells Committee, ASCE-ACI, 1979-83; Member of IASS Working Group No.5 on Concrete Shells, 1971-1983. Chairman of IASS Working Group No.5 on Concrete Shells, 1974-78, resulting in the publication of the *IASS Recommendations Concrete Thin Shells* in 1979; Editor-in-chief, Bulletin of IASS, 1983-91; Member of the Executive Council of IASS, 1973-; Vice President of IASS, 1983-91; President IASS, 1991-2000; Past President 2000-.

Distinctions: Elected Fellow ASCE, and Fellow ACI; Received the *Eduardo Torroja Medal* of IASS in 1990. Listed in Who's Who in Engineering and in Who's Who in America.

2. HONOURS FOR PROFESSOR S.J.MEDWADOWSKI IN YEARS 2001 TO 2003

Professional activity and achievements of Professor S.J. Medwadowski was honoured many times. The last, and probably most significant are shortly documented below.

2.1. Honorary Member of IASS

During IASS Symposium in Nagoja, Japan, at the 9 October 2001, Professor S.J.Medwadowski was nominated as Honorary Member of IASS. It was given during Opening Ceremony.



Fig. 2 Moment of nomination of Professor S.S.Medwadowski on Honorary Member of IASS at 9.10.2001

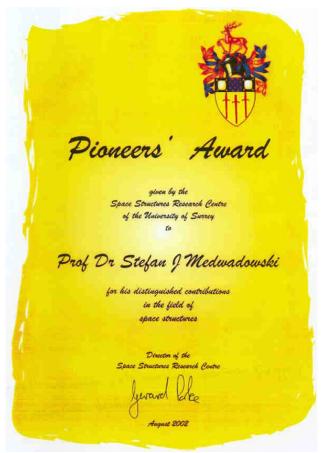


Fig. 3 Pioneers' diploma for Professor Dr S.J.Medwadowski

2.2. Pioneer of Distinguished Contributions in the Field of Space Structures

Professor S.J.Medwadowski was awarded during the Fifth Internatinal Conference on Space Structures, organized by Faculty of Civil Engineering, University of Surrey, Guildford, Surrey, (GU2 7XH) United Kingdom.

Award was given by Space Structures Research Centre of the University of Surrey, UK, at 21 August 2002 (wednesday) during special Pioneers' Award Ceremony (5:00pm) directly before closing Ceremony. The diploma was accepted in the name of Prof. S.J.Medwadowski, on His written authorization, by prof. J.B.Obrębski, Warsaw, Poland.



Fig. 4 Professor Dr St.J.Medwadowski, IASS Symp. Nagoya, 9.10.2001

2.3. Honorary Professor of University of Warmia and Mazury, Olsztyn, Poland

During Sixth Scientific-Technical Conference on *Actual problems scientific-exploring of civil engineering*, Olsztyn-Kortowo, 25-26 April 2003, Prof. S.J.Medwadowski was nominated as Honorary Professor of University of Warmia and Mazury. The nomination was accepted in the name of Professor S.J.Medwadowski by His brother-in-low Mr. W.Maciejewski.

The nomination was handed in at 25 April 2003, at 11:35 during Opening Ceremony in *aula* of Institute of Civil and Sanitary Engineering on terrain of University of Warmia and Mazury, Kortowo, Olsztyn, str. Heweliusza 4.

2.4. Honorary Member of IASS Polish Chapter

The membership certificate given today at 12 September, 2005 is shown in the Fig.5. The nomination is accepted in the name of Professor S.J.Medwadowski by His sister and brother-in-low Ms. & Mr. W.Maciejewski.

Fig. 5 Certificate of Honorary Membership of IASS Polish Chapter for Professor Dr Stefan Jerzy Medwadowski

2.5. Commemorative Medal

The Commemorative Medal in occasion of the

XI th anniversary of LSCE from 1995 to 2005 & TEN YEARS OF IASS POLISH CHAPTER

given by prof Jan B. Obrębski

Charman of Polish Chapter of International Association for Shell and Spatial Structures

to

Professor Dr Stefan Jerzy Medwadowski,

- Participant of LSCE 1995, 96, 2002,
- Member of Advisory Panel LSCE 1995,
- Member of Honorary Committees LSCE 1998, 2002, 2004, 2005
- Promoter of PC IASS,
- IASS President 1991-2000

Warsaw, 12 September, 2005

The nomination is accepted in the name of Professor S.J.Medwadowski by His sister and brother-in-low Ms. & Mr. W.Maciejewski.

Fig. 6 Commemorative Medal for Prof. S.J. Medwadowski

3. PROJECTS

Here are listed some more important project, quoted after Ref 1.

3.1. Arenas

- Athletic Center at the University of California at Santa Cruz (1964), steel space frame
- Maples Pavilion of Stanford Universitu in Palo Alto (1968), multipurpose arena seats 5,500
- Spanos Center at the University of the Pacific in Stockton (1981) seats 6,000 glued-laminated timber, has a radial grid of wood trusses.
- Multipurpose Center at the University of California at Santa Barbara, 1984, seats 6,000, roof is a grid of glued-laminated wood trusses.

3.2. Theatres and churches

- United Church of Squaw Valley, undertaken with architect Roy Waranabe, 1960
- Zellerbach Theater and Playhouse at University of California at Berkeley, 1968, 2,000-seat theatre and 600-seat playhouse, with cooperation with architects Demars and Wells..

3.3. Concrete buildings

- Calaveras Cement Company in Redding, 1960
- The Summit at 999 Green Street in San Francisco, 32-level building, 1965
- The Mount Angel Abbey Library

3.4. Pedestrian bridge

 Pedestrian bridge across a wooded canyon on the campus of the University of California at Santa Barbara, 200-foot span, 1966.

3.5. Spatial structures for optical telescopes

- Keck Telescope at Manua Kea, Hawaii, an alt-az telescope with a 10-meter diameter mirror, 1979-1991 (completed)
- Hubby-Eberly Spectroscopic Survey Telescope (SST) for Mc Donald Observatory in Texas, nearly 10-meter segmented mirror, 1997.
- California Extremely Large Telescope (CELT), segmented mirror of 30m in diameter, under designing.



Fig. 7 Comparison of CELT telescope size with Notre Dame Cathedral facade, presented by Prof. S.J. Medwadowski, IASS Symposium 2001 in Nagoya, Japan

4. CONGRATULATIONS

We all, members of IASS Polish Chapter, congratulate for Professor Dr S.J.Medwadowski of His excellent scientific and technical achievements.

We try to express our warm thanks for Professor S.J.Medwadowski for his moral support and encouraging us to cooperate with IASS. It was bringing us to develop systematically our investigations over lightweight structures in civil engineering.

5. REFERENCES

 J.F.Abel: Structures by Stefan J.Medwadowski. Journal of the International Association for Shell and Spatial Structures, Vol. 41, (2000) n.3, 137-146

¹) J.B. Obrębski, Institute of Structural Mechanics, Warsaw University of Technology, Al. Armii Ludowej 16, 00-637 Warsaw, POLAND. tel: (4822) 0 601827287 or tel: +48-601-82-72-87 or (4822) 825-69-85 http://www.fema.net.pl/symp2002; e-mail: jobrebski@poczta.onet.pl or (SMS): (GSM) +48601827287 or +48601827287 @text.plusgsm.pl or fax: (GSM) +48601827284 or (4822) 845-18-85 or (48-22) 825-69-85;