REJESTR DOTYCZY:

KARBOWIAK Antoni-Emil

s/c Tadeusza i .....

z d. .....

* 1 marca 1923 w Warszawie

kraj: POLAND

+ 2.07.2011 w Little Bay, Sydney

kraj: Australia

pochowany: .....

nr grobu: .....

Nr rejestracyjny

...../.....

Nota zamieszczona:
w tomie .....
czesci .....

Indeks

INŻYNIEROWIE /elektr./

NAUKOWCY

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znak rozpoznawczy

Uwagi:

ADRES: c/o Univ. of N.S.W., Kensington, N.S.W. 2033
Australia

B.Sc./Eng., Ph.D. /London, C.Eng., M.I.E.E.
Prof. of Eletricae Engineering Univ.of S. Wales, Sydney

Nota:

Przypisy:

m. July 1949 Grace C., dother A.Emery. 2 sons and 2 dtrs.

Źródła i bibliografia:	znak rozpoznawczy
Who s Who in Australia XIX edition 1962 , Melbourne edited by J.S.Legge	137

Obituaries Australia

Karbowiak, Antoni Emil (Toni) (1923–2011)

by Malcolm Brown

Toni Karbowiak could not keep his hands off electricity and wires, exploring their potential and possibilities – even at the peril of his family – and was eminently suited after the upheaval of World War II to become a pioneer of telecommunications engineering. He occupied the first chair of communications in Australia, at the University of NSW, and was a leading figure in the development of optical communications and telecommunications.

His early research helped with the technology of the optical cable. When in charge of telecommunications research at Standard Telephone Laboratories (STL) in Britain, he mentored Charles Kao, who went on to win the 2009 Nobel prize for physics and in his acceptance speech referred to Professor Karbowiak.

Antoni Emil Karbowiak was born in Warsaw, Poland, on March 1, 1923, the son of a commerce teacher, Tadeuz Karbowiak, and Eugenia von Friedberg. He was educated in Poland and in his senior high-school years specialised in the physical sciences.

As a boy, he dropped wires from the first floor of his aunt's flat on to a 415-volt cable coming into the building and produced sparks. Then he dropped thicker wires and managed to blow up the street transformer.

He also read about a new electrotherapy and asked his mother whether he could try it on her but she refused. Brother Andrez was more amenable but when he found Karbowiak attaching an electrode to his head and one to his knee, he bolted, probably saving his life.

On September 1, 1939, Germany invaded. British and Polish radio played Chopin continuously until Warsaw fell, giving Karbowiak a lifelong affinity for the composer.

Aged 16, he was sent to a German-controlled factory to work and at 18, was drafted into the German army. He was assigned to an engineering unit and sent to France. After the D-Day invasion, he deserted but was shot by the Americans. He recovered, deserted again and surrendered to the Americans.

He was taken to Stirling Castle in Scotland and because Poles, even those who had fought for Germany, were considered allies, he was assigned to an engineering unit in a Polish division of the British Army.

At war's end, Karbowiak was offered a chance to complete his education in England. He was billeted by Albert and Lucy Emery outside London, where he struck up a relationship with their daughter, Grace, a trainee nurse.

He worked for STL, which was doing research on pulse code modulation, a key technology in the digital age. He established an optical laboratory there and had Kao as his protege. On July 1, 1950, he married Grace. He then completed his PhD at the University College London.

In 1964, Karbowiak accepted an invitation to take the chair of communications at the School of Electrical Engineering, UNSW. He was a key member of the Davidson Committee of Inquiry into Telecommunications Services in Australia.

In 1976, as a member of the then Radio Research Board, he was instrumental in establishing the first optical-fibre workshop at the university. He continued to take a leading role in this workshop, which developed into the Australian Conference on Optical Fibre Technology.

Karbowiak was a successful university administrator and the head of department for several years. For fun, he invented the timbron, a musical instrument that could produce an infinitely variable pitch, as well as variability across the range of instruments in the orchestra. He also enjoyed photography and his rose garden.

Karbowiak had several books published, including *Trunk Waveguide Communication* and *Theory of Communication*. He co-authored several others, including *Information, Computers, Machines and Man*, and wrote research publications. Among the projects for which he acted as adviser was development of the cochlear implant.

He was awarded a doctor of science degree from the University of London.

Karbowiak's later years were blighted by the onset of dementia. He is survived by Grace, children Christina, Peter, Elizabeth, John and James and 12 grandchildren.

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	Karbowiak, Antoni Emil (Toni) (1923–2011)
Born	1 March 1923 Warsaw, Poland
Died	2 July 2011 Little Bay, Sydney, New South Wales, Australia
Cultural Heritage	▪ Polish
*Occupation**	▪ academic (1964-1988) New South Wales, Australia ▪ communications engineer (1964-1990) New South Wales, Australia ▪ electrical engineer (1964-1990) New South Wales, Australia
*Workplaces**	▪ University of New South Wales (electrical engineering) (academic, 1964)

* Dates are approximate