

Four Decades of Higher Education in Lighting Technics

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***Abstract:** In this paper, I would like to present the four decades history of the education of specialists in the fields of vacuum technology and illumination.*

***Keywords:** color, pattern, harmony*

1 About the Education

In 1968. the managing of factory Tungsram (EIVRT) proposed to educate specialists for the vacuumtechnical industry in the fields valve technology, vacuumelectronics and light source technology. In the new college wich was the successor of Kandó Kálmán Technical School has been established a new department namely Department of Technology of Electronic Components and Devices. This department has undertaken the education of subjects „Valve and Light Source Technology” together with the Semiconductor Technology.

In 1968. the first students of the Kandó College began their studies in the above-mentioned fields, and in 1971. graduated degree in engineering.

The story of the 4 decades: story of changements in the syllabus.

The manufacture of valves came to an end, and it arosed the possibility to the detailed study of light sources. The number of lessons increased on the initiative of Hungarian Electrotechnical Association the applied lighting technics appeared in syllabus (at the end of seventies).

1985: The year of the introduction of postgradual education with three semesters and engagement to write a diploma work. It restarted in every other years with 20-25 students.

The syllabus of lighting education includes the following subjects:

- lighttechnical basic knowledges
- measuring technology
- coloristics and colorimetry
- light sources
- luminaires
- calculations of lighting planning
- indoor and outdoor lighting
- economical and operational aspects of lighting

With the financial assistance of Tungram firm it became possible to equip the laboratory with instruments for the most important measuring of light sources. Since we had no black labor, in the first periode (years of '70) these measurements were of electrical character. After several movements we could complete a dark labor, and get modern instruments with the help of Tempus -grants.

Now the students can measure:

- illuminance, luminance, luminous flux
- light distribution of luminaire with goniophotometer
- spectral and coloristic properties of light sources
- properties of electronic ballasts and ignitors

2 Persons of Teaching Staff

In the early time the lectures were conducted by engineers of Tungram. (Mrs. M. Poppe, Mr. L. Várkonyi, on the part of the College the practices were conducted by Mr. B. Bárczy.)

From 1978. the teachers of the College took over the outside lecturers from the education.

- dr. Borsányi János
- Regyep György
- Eperjessy Mária (1945-2001)
- Molnár Károly (at present)

Several persons took part in the postgradual education and are still taking part in it from industrial field and from other institutions.

The teachers wrote lecture notes and course books for the students in several versions and editions.

Let us commemorate the teachers, who worked in this education during many years or decades (and departed from this life):

- Debreczeni Gábor (1932-2008)
- Gergely Pál (1922-1998)
- dr. Horváth József (1940-2005)
- dr. Lantos Tibor (1929-2004)
- Pollich János (1950-2001)
- Vincze Vilmos (1921-2003)

Thanks to them for their expertise and excellent educational work.

In the period 1971-2011, cca. 900 students completed the graduate course and between 1985-2011, cca. 200 students in postgraduate one.

Finally some words about the situation for the moment:

In the graduate education things are getting worse.

The number of lessons has been reduced.

The number of students has been reduced as well.

The number of obligatory lessons of teachers increased, they have less time to train the students.

The tendency is shifting from graduate toward postgraduate and self-financing education. Therefore because of weakening of graduate education we have confirmed the postgraduate one, at present the duration of course is extended in 4 semesters.

References

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