ROMANIAN EXPERIENCE IN RADIATION PRESERVATION OF CULTURAL HERITAGE

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CHILDHOOD
silly tentatives – silly conclusions

Early ’90:
- painted icon / insect attack;
- treatment designed by a conservator, with a *defectoscopy equipment* (Co60 ~ 5 Ci), no dosimetry;
- experiment was officially reported (proudly)
- author conclusion (in sotto voce / out of the record):
  “Irradiation is not a good technique. It was not efficient”

Comments:
No intervention without a basic knowledge
No intervention without dosimetry control
Disinfestation without trained people & proper equipment = NO
ADOLESCENCE
(some knowledge, wrong equipment)

experiments in a nuclear institution;
equipment = irradiation facility IETI - $10^4$ Ci;
dosimetry (Fricke);
extremely non uniform irradiation field;

a) a special cloth with a strange fungal attack producing color fading
b) roten wooden sculptures (Trojan horse for any museum)
YOUTH

• ARC NUCLEART = a model // knowledge repeatedly presented at Annual Meeting of Conservators - without much success -

• Missing:
  - a proper facility
  - a common language;
  - trust

Our best: a booklet for conservators

• (IRASM at the skyline)
IRASM – IFIN-HH Department
MATURITY

IRASM Facility = proper equipment; proper dosimetry system

• Lendmarks:
  - A reluctant restorer
  - A daring priest
  - A combination of hazard, need & trust
A reluctant restorer
A daring priest
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A daring priest
A combination of hazard, need & trust
A combination of hazard, need & trust
Side effect evaluation - R&D
(proper laboratories & motivation)

ARCON – “…a chance for archive”

DELCROM – “…polychrom wood”
SINERGY

MICROBIOLOGY

BIOCOMPATIBILITY
EVALUATION

DOSIMETRY

IRRADIATOR

DETECTION of
IRRADIATED
FOODSTUFFS

PHYS. & CHEMICAL TESTS
Achievements


• RELIGIOUS INSTITUTIONS: One Tree Monastery (icons), 2 Churches (entire wooden inventory), Old Book Collection (NGO)

• ARCHIVES: IFIN-HH archive (~ 30 m3), ICPE archive and library (~49 m3), I.C.Dragan private library (~10 m3), National Film Archive (~300 rolls), National Broadcasting Company (preliminary tests – we are waiting for the new archive building)
Achievements ~ 160 m³

• Treatment start was based on PR activities
  - Presentations at Annual Meeting of Conservators
  - A booklet
  - Prompt interventions in emergency cases

• Sustainable activity was / is based on
  – proper equipment
  – proper and proved knowledge
  – trust
Thanks for your attention