

ALEKSANDAR S. TOMIC

Born: 25. september 1947 .
Slavonska Pozega, Croatia.

Education:

*GIMNASY, in Gradiska, Bosna & Herzegovina.

*FACULTY of SCIENCE, UNIVERSITY OF
BELGRADE:

- Diploma degree of (theoretical) PHYSICS,
1973, (Diploma work: *Cherenkov effect in cold
anisotropic plasma*)
- Diploma degree of ASTRONOMY
(astrophysics), 1975,

* FACULTY OF MATHEMATICS, University of Belgrade:

- Magister of astrophysics degree – (SOLAR PHYSICS), 2005.
(Mr thesis: *Photographic determination of proper motion of sunspots and
investigation of differential rotation of the Sun.*



PROJECTS:

- (1) 1973-1974: PHOTOGRAPHIC OBSERVATION OF MERCURY TRANSIT, with
Pero Djurkovic as consultant, People's observatory, Belgrade
 - (2) 1974-1997: COMPETITIONS IN ASTRONOMY OF PUPILS IN SERBIA, in the
movement «Science for youth», as lider of team,
 - (3) 1975-1976: SOLAR AND LUNAR ECLIPSES, guiding team of amateurs on the
People's observatory, Belgrade,
 - (4) 1977-1980: THEORETICAL FOUNDATION OF CLASSICAL ASTROPHOTO-
GRAPHY, People's observatory, Belgrade, (including writing of the
book on ASTROPHOTOGRAPHY)
 - (5) 1980-1981: ELECTRON SCATTERING ON THE HYDROGEN ATOM, guided by
dr. Petar Grujic, Institute of physics, Belgrade
 - (6) 1981-1982: OPTIMIZATION OF AMATEUR RADIO-COMMUNICATION VIA
METEOR TRAILS, with electro-engineers, guided by dipl.eng.
Dragoslav Dobricic,
 - (7) 1983-1984: STRUCTURAL ANALOGY BETWEEN ELECTRIC AND
GRAVITATIONAL FORCE, with dr Petar Grujic and dr Djuro Koruga as
consultants,
 - (8) 1983: PHOTOGRAPHIC OBSERVATION OF OCCULTATION OF JUPITER,
colaboration with Ninoslav Cabric and Vladan Celebonovic
 - (9) 1984: HISTORY OF ASTRONOMY, colaboration with Borivoje A. Jovanovic, and
Nenad Jankovic, People's observatory, Belgrade
 - (10) 1985-1988: EPISTEMOLOGY OF SCIENCE-RUDJER BOSKOVIC, with Borivoje
A. Jovanovic
- (*) 1987-1989: EXCURSIONS IN LITERATURE, with Borivoje A. Jovanovic
(**) 1991-1994: SURVIVAL IN SERBIA, guided by the Government of Serbia

- (11) 1992: NIKOLA TESLA AND ASTRONOMY, with mr Branimir Jovanovic, Museum of Nikola Tesla, Belgrade
- (12) 1993: Writing text book ASTRONOMY (for gimnasy), with dr Milan S.Dimitrijevic
- (13) 1995 - 1998: DISKRETIZATION OF THE STATE IN MACROSCOPIC GRAVITATIONAL SYSTEMS (with academician SANU prof dr Zvonko Maric as consultant),
- (14) 1996: PARTIAL SOLAR ECLIPSE, guided a team of amateurs astronomers, People's observatory, Belgrade
- (15) 1997-1999: Writing the book ASTRONOMY-PRACTICAL WORKS,
- (16) 1999-2000: PHOTOGRAPHIC OBSERVATION OF TOTAL SOLAR ECLIPSE, guided a team of amateurs astronomers,
- (17) 2000-2002: BIOPTRON K-3 PROJECT, guided by Prof dr Dj.Koruga, Faculty of Mechanical Engineering, Belgrade,
- (18) 2003: PHOTOGRAPHIC OBSERVATION OF MERCURY TRANSIT, colaboration with Vladimir Nenezic, People's observatory, Belgrade
- (19) 2003-2004: Writing the book SOLAR SYSTEM-PRACTICAL EXERCISES,
- (20) 2004-2005: FRACTAL NATURE OF SOLAR SYSTEM, colaboration with prof dr Djuro Koruga and mr Natasa Misic, Faculty of Mechanical Engineering, Belgrade
- (21) 2004-2005: EPISTEMOLOGY OF SCIENCE – JOHAN KEPLER
- (22) 2005-2006: work on MELANOMA INVESTIGATIONS, project guided by prof dr Djuro Koruga, Faculty of Mechanical Engineering, Belgrade

Professional associations:

In bord of The **Society of astronomers of Serbia**; as president 1986-1987.

In **Astronomical society Rudjer Boskovic** from 1974. to 2005. in bord; editor in journal VASIONA too; from 2005. editor and chief.

Active in few other professional societies in astronomy, mechanics, physics, philosophy.

Few years in bord of the journal DIJALEKTIKA published by Belgrade University.

Institutions:

1973 - 1987. People's observatory in Belgrade, Kalemegdan, 8 years as director.

1987 - 2005. XIV gimnasy, XI gimnasy, Classical gimnasy and VI gimnasy in Belgrade, as the professor of physics and astronomy.

2000– 2005 Center for molecular machines, Faculty of mechanical engineering, Belgrade, external assistant

Published papers:

Published papers are in the area of: **astrophotography, atomic physics, biomechanics and biophysics, cosmogony, ephemeridal astronomy, epistemology and history of science, education in physics and astronomy, meteor astronomy, nanogravity, optics, practical astro physics, solar physics, etc.**

Also, published a monograph Astrophotography and tree text-books for high school.

Reviewer of few books in astronomy.

Patent in optical metrology (first author).