

# Curriculum Vitae

## Mike (Moshe) Green

Email: [mike@lightning.co.il](mailto:mike@lightning.co.il)

Website: [www.lightning.co.il](http://www.lightning.co.il)

Languages: English (mother tongue), Hebrew (lecture and publish in Hebrew)

Education:

- Bachelors in Electrical engineering (College of Judea and Samaria) (מהנדס)
- Tech. Eng in Electrical engineering (Ort) (הנדסאי)
- Certified Electrician (Ministry of Industry) (חשמלאי מוסמך)
- Various technical courses in electronics and computer applications

Certification:

- Registered in the National Listing of Engineers- Electrical (רשום בפנקס המהנדסים)
- Registered in the National Listing of Tech. Engineers- Electrical (רשום בפנקס ההנדסאים)
- Licensed as an Electrical Engineer (רישיון מהנדס חשמל)
- Certified as Energy Auditor by Ministry of National Infrastructure
- Certified QCM for contractors U.S. Army Corps of Engineers

Published Papers:

- Improving Efficiency of PV Systems Using Statistical Performance Monitoring IEA PVPS Task 13, Subtask 2 Report IEA-PVPS T13-07:2017 June 2017 **ISBN 978-3-906042-48-0**
- Technical Assumptions Used in PV Financial Models IEA PVPS Task 13, Subtask 1 Report IEA-PVPS T13-08:2017 May 2017 **ISBN 978-3-906042-46-6**
- Novel strategies for PV system monitoring - PV-Tech Power - Volume 2-pg62-67 Feb. 2015
- Practical Testing of Lightning Protection Systems in light of existing standards – 15<sup>th</sup> SEEEI conference Eilat Israel December 2014
- Analysis of Long-Term Performance of PV Systems IEA PVPS Task 13, Subtask 1 Report IEA-PVPS T13-05:2014 November 2014 **ISBN 978-3-906042-21-3**
- Analytical Monitoring of Grid-connected Photovoltaic Systems IEA PVPS Task 13, Subtask 2 Report IEA-PVPS T13-03: 2014 March 2014 **ISBN 978-3-906042-18-3**
- Thin-film PV in Israel – Simulation vs. Reality –12th SEEEI conference Eilat Israel 2011
- ניתוח אמינות ונצילות של מערכות סולאריות, תשתיות אוקטובר 2011
- ניטור יעילות מערכות פוטו וולטאיות, תשתיות אוגוסט 2011
- סוג ההארקה וזרם קצר בלוח כפונקציה בבחירת רכיב להגנת ברקים, כנס בדיקות ומדידות 2006
- Application of Surge Protection for Very Low Voltage Devices- 6th Conference of SEEEI 2006
- הגנה מפני ברקים למערך סיסמאלוגי בשירות האו"מ בצפון הארץ, הכנס ה-5 של מהנדסי חשמל 2005

- הגורמים הפעילים בבחירת רכיב ללוח ראשי או בודד, הכנסה 5 של מהנדסי חשמל 2004
- משק חשמל מודרני- שיטות מניה וחיוב: נקודת כוח, ינואר 2000
- תכנון מערכות הגנה בפני נחשולי מתח- פאזה אחרת, ספטמבר 2000

Three of these papers have been re-published in the industry periodical "השמל ואנשים"

#### Participation in Societies:

- Member of IEEE
- Senior member SEEEI; served on the board of the Committee for Renewable Energy
- Appointed Israeli representative to the IEA PVPS task 13
- Worked on Israel Standard Organization committee Standard SI-62548 for installing roof mounted PV systems
- Appointed to the team of consultants representing Israel in IRENA

#### Research Experience:

- "Halutz" – Solar-Era.net pilot project with Decisionmakers Ltd. (Isr), University of Cyprus, Electricity Authority of Cyprus and the Cyprus Department of Meteorology to implement "heznok" developed algorithms in an electrical distribution grid
- Joint project with University of Cyprus on Potential Induced Degradation (ministry of economics) – Head of Israeli research
- "Heznok" – Early Detection of Faults in PV systems (ministry of Energy) – Head of research
- "Heznok" – Photo-voltaic Production Prediction and Optimization (ministry of Energy) – Head of Research
- SolarBead – Development of micro-inverter "Inverbead" and others – Test site engineering
- PVPS Task 13; part 1 (2010-2014) – Head of subtask 1.3 – Fault analysis
- PVPS Task 13; part 2 (2014-2017) – Activity leader of 2.2 - Specific Data Evaluations
- PVPS Task 13; part 2 (2014-2017) – Member of Subtask 1: Economics of PV System Performance and Reliability

#### Professional Experience

March 2003- today- Consulting Engineer (owner of M.G. Lightning Ltd)

- Energy Auditing for municipalities, regional councils and factories
- Quality Control supervisor for the USA Army Corps of Engineers
- Serve as CTO for the Arava Power Company (utility grade PV fields) (2008–11)
- Design lightning protection for control systems in Israel Electric co. power stations
- Consulting on Solar PV design in the private sector
- Design lightning protection for cellular telephone companies in Guinea and Liberia
- Due diligence on wind projects for Israeli developers in Israel and Europe
- Consult on lightning protection to Israel Airport Authority – new air traffic control tower
- Technical Consultant to banking institutions for medium and large PV projects
- Hybrid micro-grid development in Malawi and Uganda

- Energy Conservation Consultant to the Israel Airport Authority (2009–2012)
- Electrical consultant to Zomet Energy on 360MW gas fired combined cycle power plant
- Consult to “Capital Nature” a VC dealing with renewable energies and energy conservation
- Consulting on grid connection of solar energy in developing countries (Haiti, Rwanda, Albania, Nigeria, Cyprus and others)
- Consulting on lightning and over voltage protection to companies including:
  - ◊ Hospitals of the Clalit HMO (2008)
  - ◊ Israel Railway (2010)
  - ◊ Cellcom Guinea and Liberia (West Africa) (2010)
  - ◊ Tadiran Electronics (2006)
- Lecturing on electrical engineering in general and lightning and over voltage protection in particular to groups including:
  - ◊ Israel Electric company – Lightning and over voltage protection
  - ◊ Israel Electric company – PV design
  - ◊ GreenTech College/Matrix – John Bryce – Energy Management and PV design
- Consulting on matters of energy consumption and metering disputes for companies including:
  - ◊ Harel insurance
  - ◊ The Israel Opera
- Designing and consulting in the private sector, public buildings and luxury villas, particularly in the use of smart house technology

August 1998-February 2003 -Shlomo Kahane Agencies: Importers of switch-gear.

- Product manager for the DEHN line of lightning and over voltage protection
- Designed, integrated, marketed and sold the Automatic Meter Reading system “Energie 2002” to customers including;
  - ◊ Israel Aircraft Industry
  - ◊ Technion
  - ◊ Various Kibbutz communities

January 1997-July 1998 -Satec: Producers of Electrical Power Analyzers.

- Managed technical support for the Israeli market.
- Instructed engineers in the use of instruments for the purpose of power quality.

January 1995-January 1997 -Teva Pharmaceuticals: Penicillin Factory.

- Responsible for all maintenance (mechanical, electrical, production and electronic engineering) of specific production departments.
- Designed and implemented improvements on production machines.

1987- January 1995 -Building Industry.

- Head of installations for Electrical, Low voltage, and control HVAC systems.
- Projects included: Schools, community centers, light industry.