

IEEE 的投稿與躋身會士 之經驗分享

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Outline

- Introduction to IEEE
- My Personal IEEE Experience
- Submission to IEEE Journals
- Elevation to IEEE Fellow
 - IEEE membership
 - Evaluation procedure
 - Strategy
- Statistics (courtesy of Dean Wood H. Cheng, NSYSU)

Institute of Electrical and Electronics Engineers (IEEE)

- the world's largest technical professional association**
- more than 430,000 members in more than 160 countries**
- more than 120,000 Student members**
- 333 sections in ten geographic regions worldwide**

Institute of Electrical and Electronics Engineers (IEEE)

- 38 societies and 10 technical councils**
- 2,231 chapters**
- 2,516 student branches in 80 countries**
- 790 student branch chapters**
- 432 affinity groups - Graduates of the Last Decade Young Professionals (YP), Women in Engineering (WIE)**

Institute of Electrical and Electronics Engineers (IEEE)

Publications

**→ 170 transactions, journals, and
magazines**

**→ technical books, monographs,
guides, and textbooks**

Institute of Electrical and Electronics Engineers (IEEE)

Conferences

**→ more than 1,300 conferences per
year**

**→ over 100,000 technical
professionals attend**

Institute of Electrical and Electronics Engineers (IEEE)

AWARDS

**IEEE Gustav Robert Kirchhoff Award
(Circuits and Systems Society)**

→ 2014 Recipient: C. L. Liu (NTHU)

**IEEE Inaba Technical Award
(Robotics and Automation Society)**

→ 2013 Recipient: F. T. Cheng (NCKU)

My personal IEEE experience

- PhD from UCLA in 1989
- Member since 2006 (PS and EDS)
- Senior Member since 2010
- Fellow since 2014
- > 220 papers published in IEEE serious journals/letters
- AE of IEEE JQE since Dec. 2009
- Frequently review papers for IEEE
- Plenary/Invited talks in IEEE Conferences

My personal IEEE experience

- My first IEEE paper published in 1996
- Exciting:
 - Publish in a good journal
 - With photo and bio
- No electronic version at that time,
have to go to library to copy (reprint)
- What have changed/unchanged since
1996

What have changed

- Online literature search, online download and online submission
- Many new journals
- Open Access
- SCI impact factor
- 5-year-50-billion project
- Evaluation system for University, Department and faculty members (ranking??)
- Competition from mainland China

What remain the same

- Publish or perish
- Hot/important topics
- Novelty
- Abstract
- Story (introduction)
- Results and Discussion
- English

Which Journal to submit?

- IEEE or non-IEEE Journals?
- Papers with similar topic published previously in the designated journal?
- Letters or Full-papers?
- Impact Factors?
- IEEE journals published by different societies/Councils

"Ga₂O₃ nanowire-based solar-blind photodetector"

IEEE: Photon Technology Letters (PS)

Electron Device Letters (EDS)

Tran. Nanotechnol. (NTC)

Sensors Journal (SC)

Non-IEEE: Appl. Phys. Lett. (APS)

Optics Express (OSA)

Applied Physics Express (JSAP)

Nanotechnol. (AIP)

...

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Decision

- Accept (congratulations)
- Major/minor revision
 - revise paper carefully according to the reviewers' comments: provide point-to-point reply
- Reject
 - Modify and submit to another journal?

Elevation to IEEE Fellow

- **IEEE membership**
 - Student member
 - Graduate student member
 - Associate member
 - Member
 - Senior member (apply, > 10 year professional experience)
 - Fellow (nomination and evaluation)
 - Life member

Elevation to IEEE Fellow

- Nominee:
 - senior member or life senior member
 - membership > 5 years
- 1 nominator (anyone)
- 5 to 8 references (must all be IEEE Fellows)
- Up to 3 endosers (anyone)
- Deadline: March 1 of each year



IEEE Fellow categories

- Application Engineer/Practitioner
- Educator
- Research Engineer/Scientist
- Technical Leader

Society/Council Committee

- Five or more evaluators review a Fellow nomination
- Three or more evaluators if there are fewer than 40 Fellows in the Society/Council.

IEEE Fellow Committee

- 52 IEEE Fellows with expertise in the IEEE societies/councils and the 10 IEEE Regions.

Fellow evaluation process

Mar. 1: Nomination deadline

Apr. 15: screen by Fellow Activities Staff

→ Society/Council Committee

Jun. 15: send scores to Fellow Activities Staff

Jul. 15: send scores to Fellow Committee

Sep. 1: send scores to Fellow Activities Staff

→ Fellow Committee Members

Oct.: IEEE Fellow Committee Meeting

Nov.: BoD meeting

Fellow evaluation standard

- Significant contributions
- Evidence of technical accomplishments
- Evidence by the IEEE Society/Council
- Confidential opinions of references and endorsers
- Service to other professional societies
- Total years in the profession

Number of Fellows elevated

- Any one year does not exceed one-tenth of one percent of the total voting Institute membership
- About 300 per year

Strategy (I)

- Good research
- Publish/review papers for IEEE
- Which Society/Technical Council?
- Interact with Key persons
- Participate IEEE activities in Taiwan
 - IEEE Taipei/Tainan Section (officers)
 - IEEE Chapters
- Attend Premier Technical conferences
sponsored by targeted Society/Council
- Services (TC chair/member, Editor/AE...)

Strategy (II)

History of IEEE in Taiwan

- IEEE Taipei Section: Started in October 16, 1974 with 58 members (2003 with > 2500 members)
- IEEE Tainan Section: Started in 2003
- Current member: Taipei Section ~4000
Tainan Section > 1000

Strategy (III)

IEEE Taipei Section

Officers:

Chair, 2 vice-chairs, secretary, treasurer,
co-treasurer, membership development,
membership development(industry),
student activity, educational activity,
award and recognition, industry activities,
electronic communication

33 Section Chapters: Chair, secretary,
treasurer

Strategy (IV)

IEEE Tainan Section

Officers:

Chair, 4 vice-chairs, secretary,
treasurer, co-treasurer, 2
membership developments

17 Section Chapters: Chair,
secretary, treasurer

Student Branches:

NCKU, NSYSU



Strategy (V)

- Join and become senior member early
- References from IEEE Fellows who are not ethnic Chinese
 - Organize conferences in Taiwan
 - Invited IEEE Fellows to visit Taiwan
 - International collaboration
- Prepare your documents early
- Become plenary/keynote/invited speaker in IEEE sponsored conferences
- All references agree that you are extraordinary qualified

Strategy (VI)

Apply/become a Distinguished Lecture

- **Edward Y. Chang** “III-V /Si Integration for Next Generation CMOS InGaAs HEMT for Subterahertz applications GaN HEMT for High Power Application”
- **Wood-Hi Cheng** “The Art and Science of Packaging Photonic Devices and Modules / Broadband Chromium-Doped Fiber Amplifier for Next-Generation Optical Communication Systems”

Strategy (VII)

Officer of IEEE Society/Council

IEEE Sensors Council

**President, President Elect, Vice President –
Finances, Vice President – Publications, Vice
President – Conferences, Vice President –
Technical Operations, Secretary – Treasurer**

...

Strategy (IIX)

Nomination Form:

- 6. Individual Contributions
- 7. Evidence of Technology Accomplishment
- 8. IEEE Activities 9. NON-IEEE Activities
- 12. Evaluation by IEEE Society/Council

Reference Form:

- 4. Relationship with nominee
- 5. Nominee's qualification
- 6. Your own credentials
- 8. Nominee's qualification for IEEE Fellow



IEEE Fellow Statistics

(courtesy of Dean Wood H. Cheng, NSYSU)

表1-1: 1999至2013年IEEE會士提名人數統計

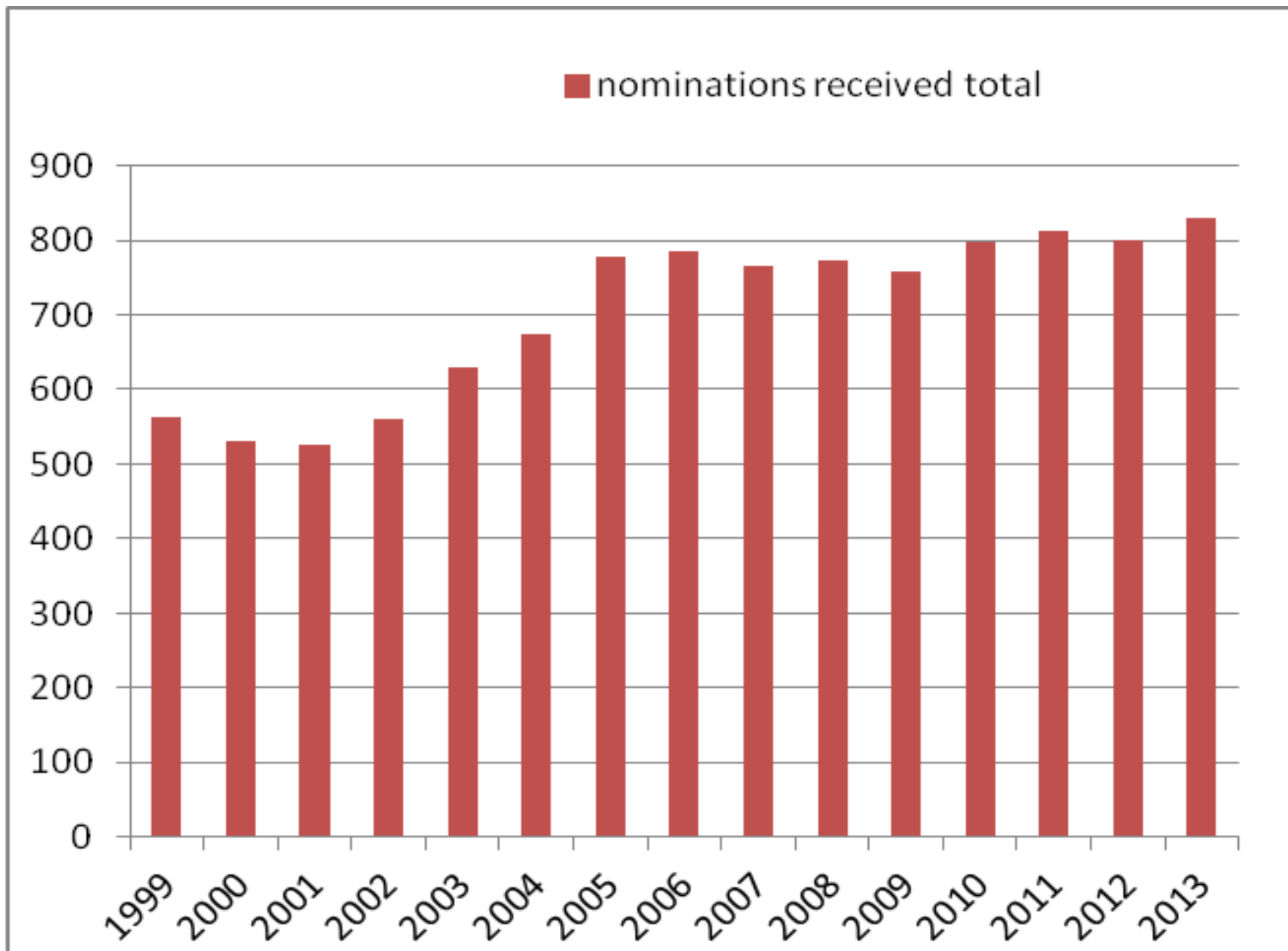


表1-2: 1999至2013年IEEE會員獲得會士人數及成功率統計

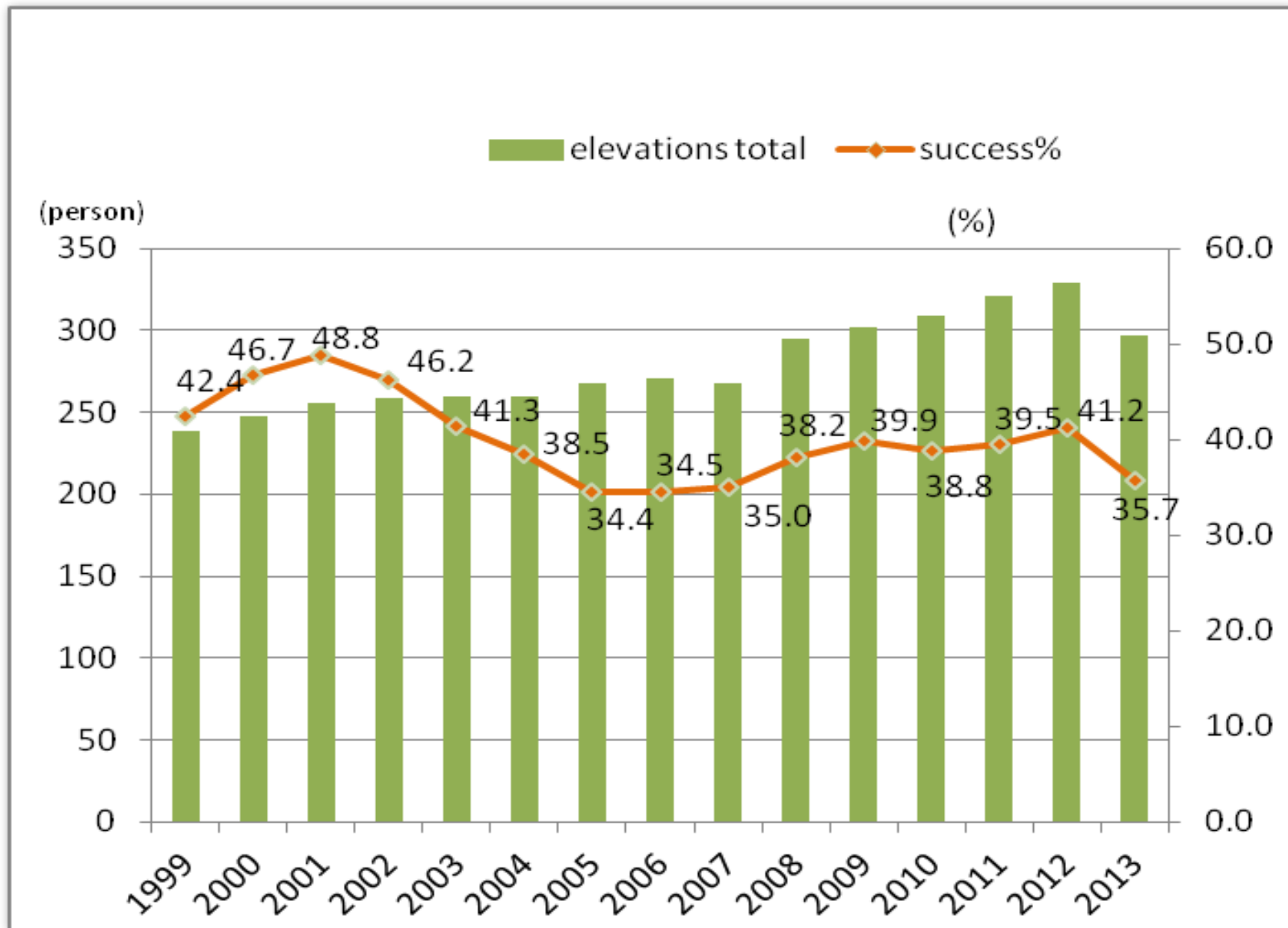


表1-3: 1999至2013年教育界提名會士人數統計

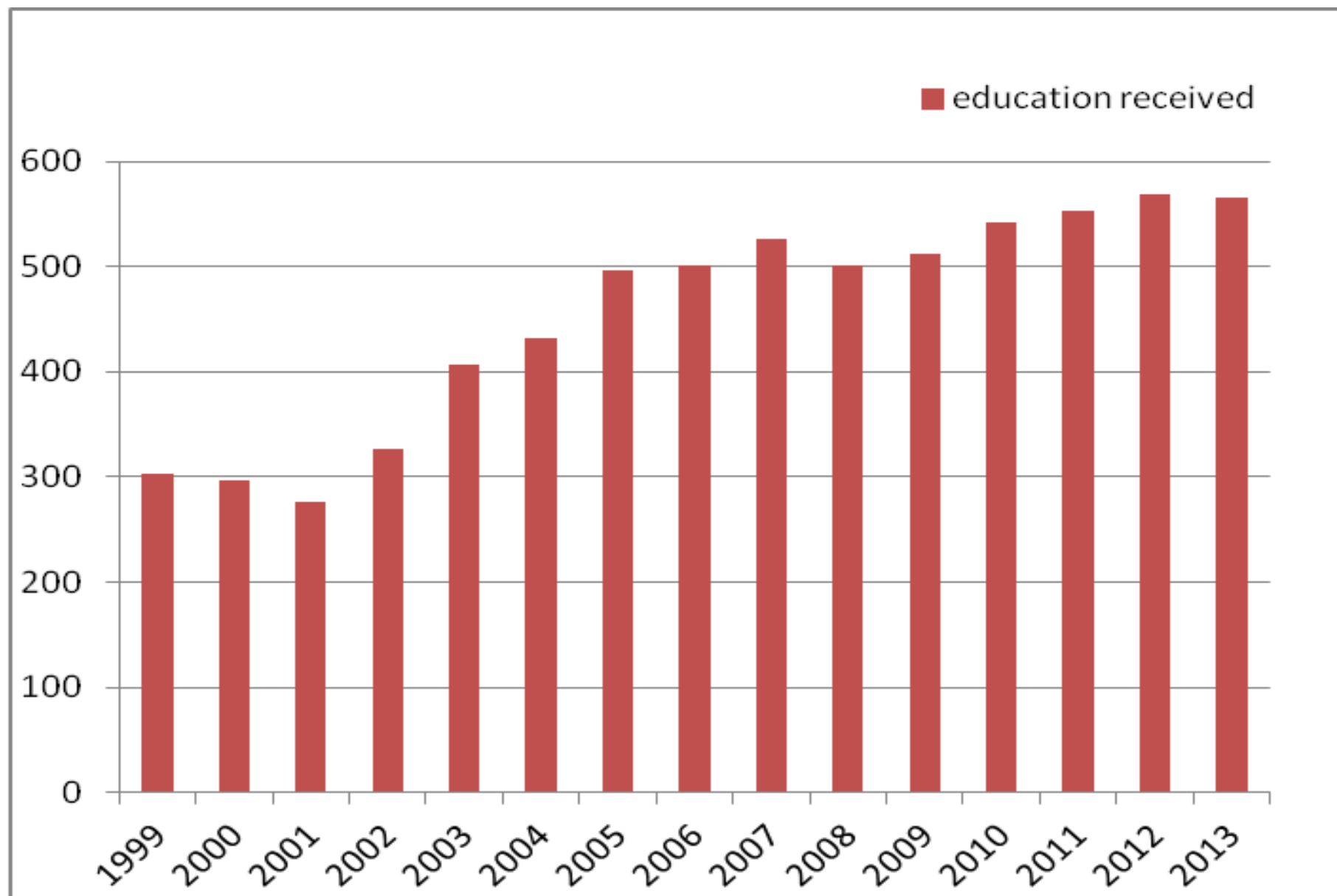
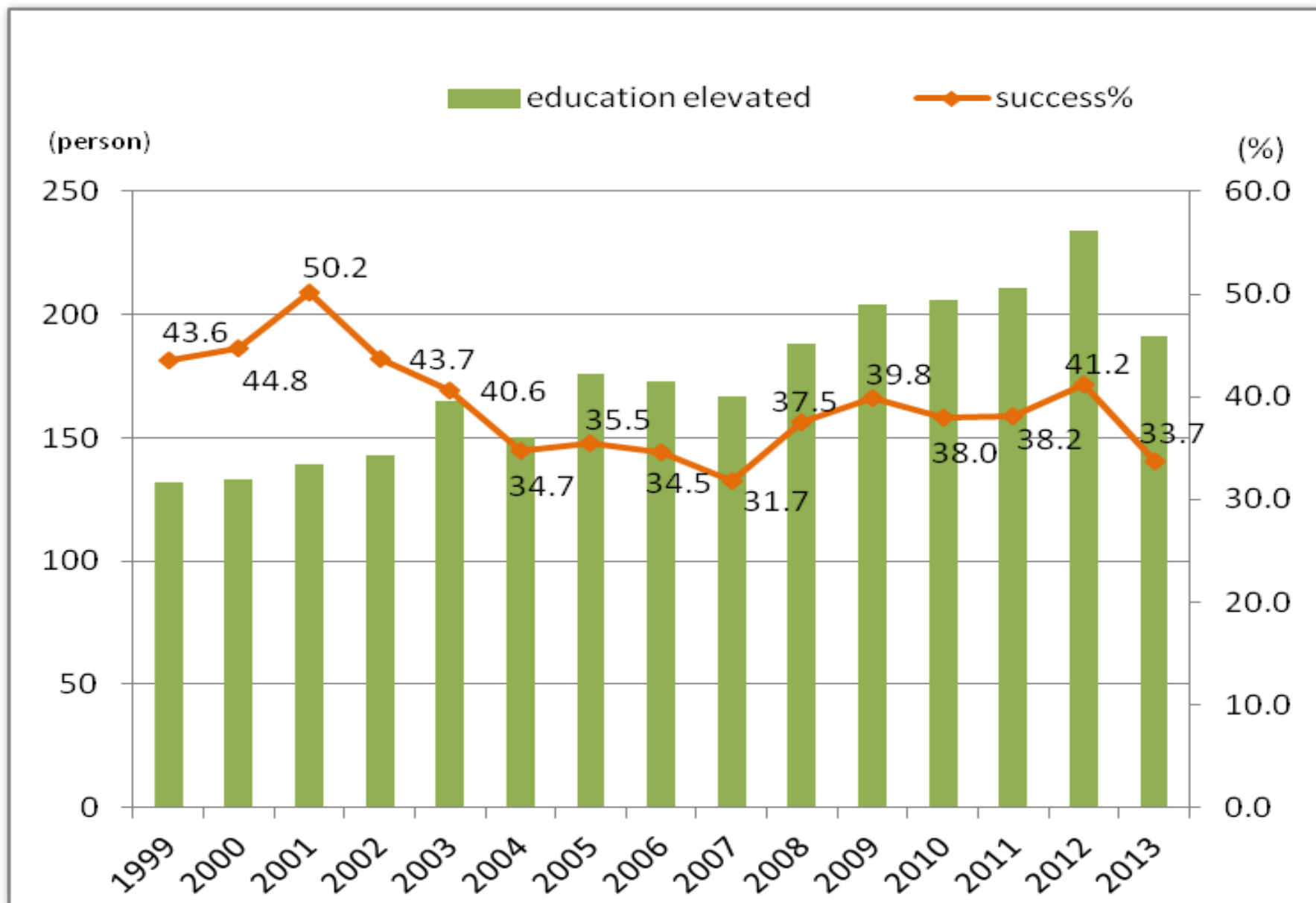


表1-4: 1999至2013年教育界獲得會士人數及成功率統計



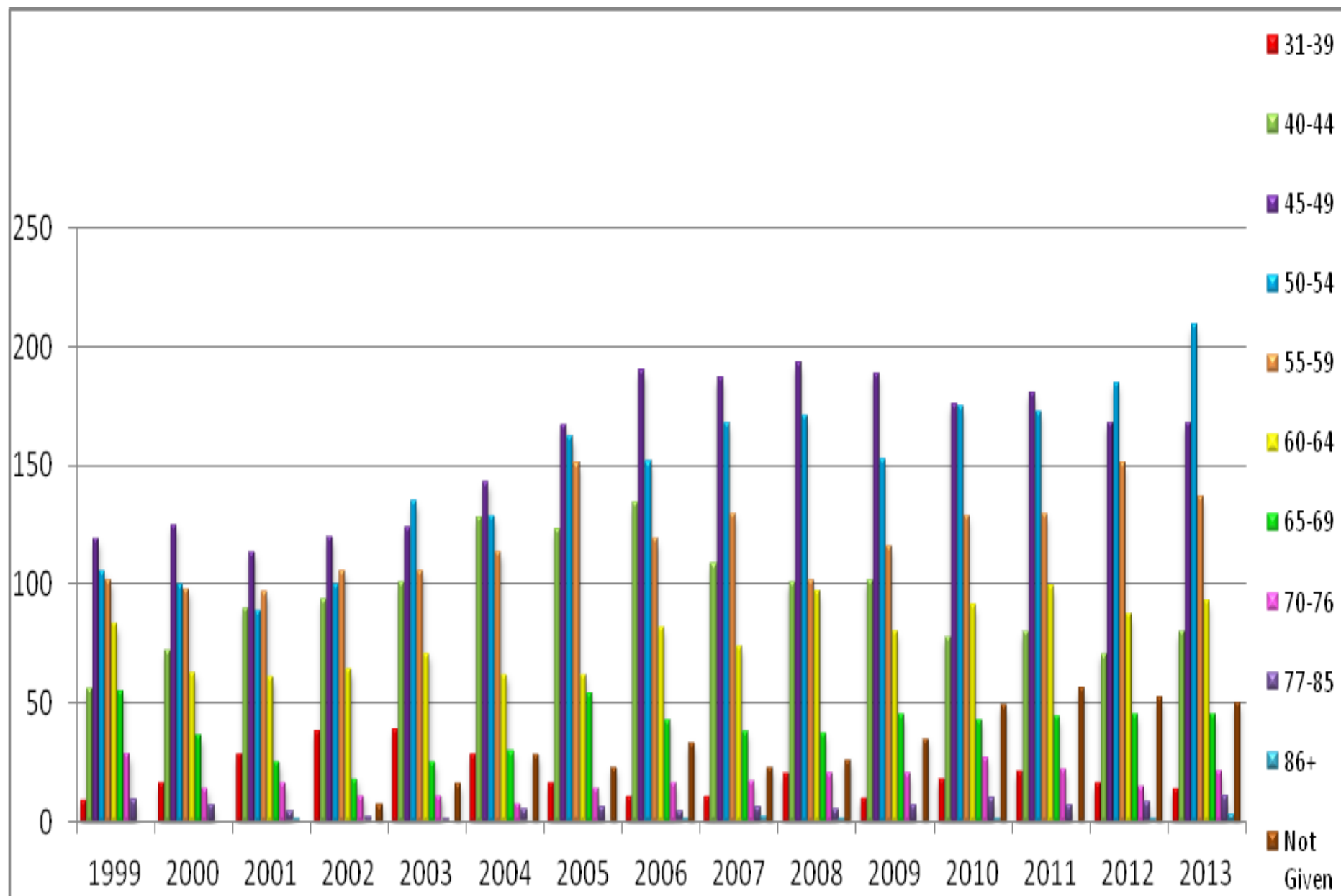


表2-2:1999至2013年IEEE獲得會士人數年齡層分佈

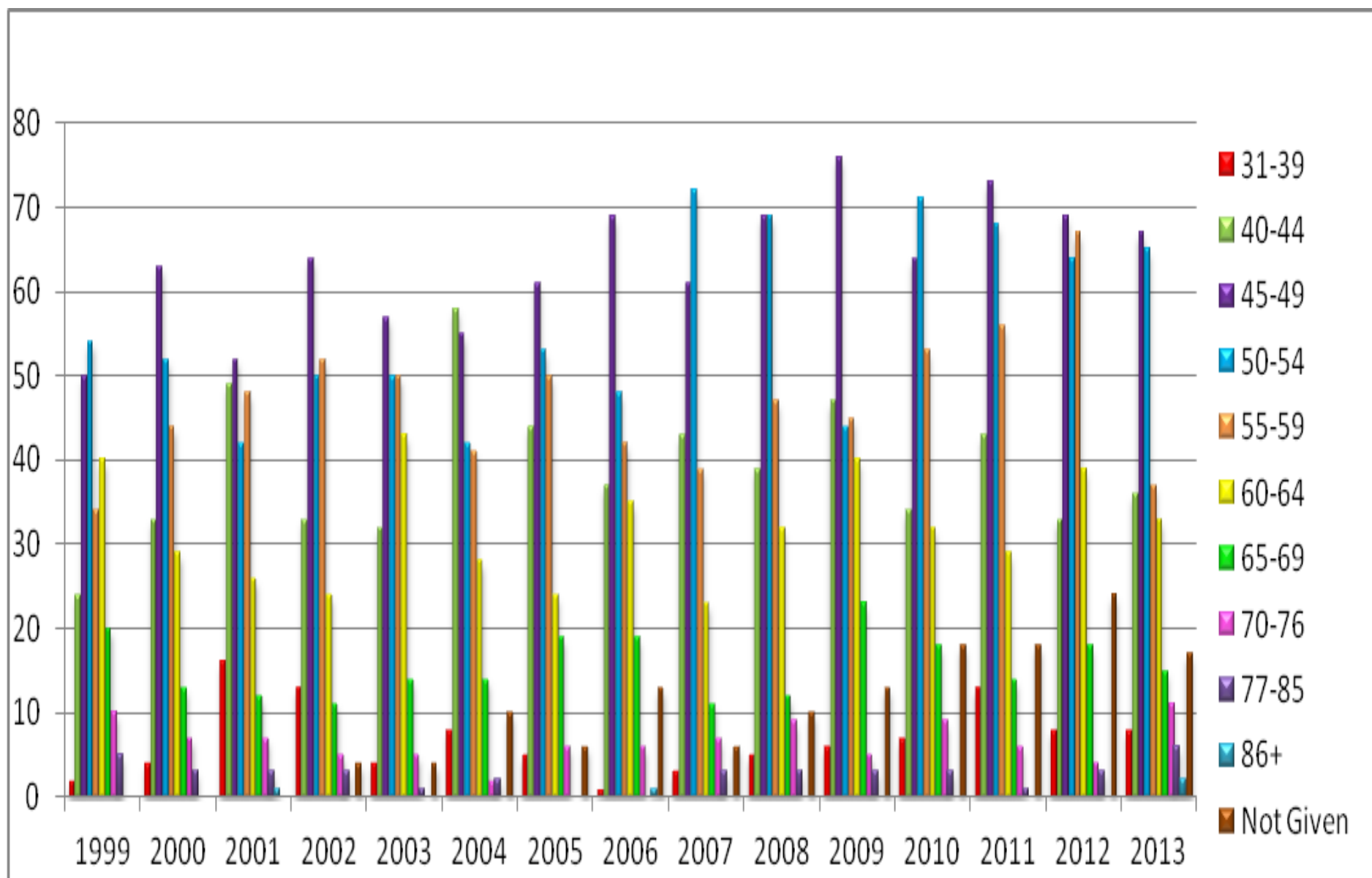


表3-1: 2007至2013年領域屬於應用工程師提名及獲得會士人數

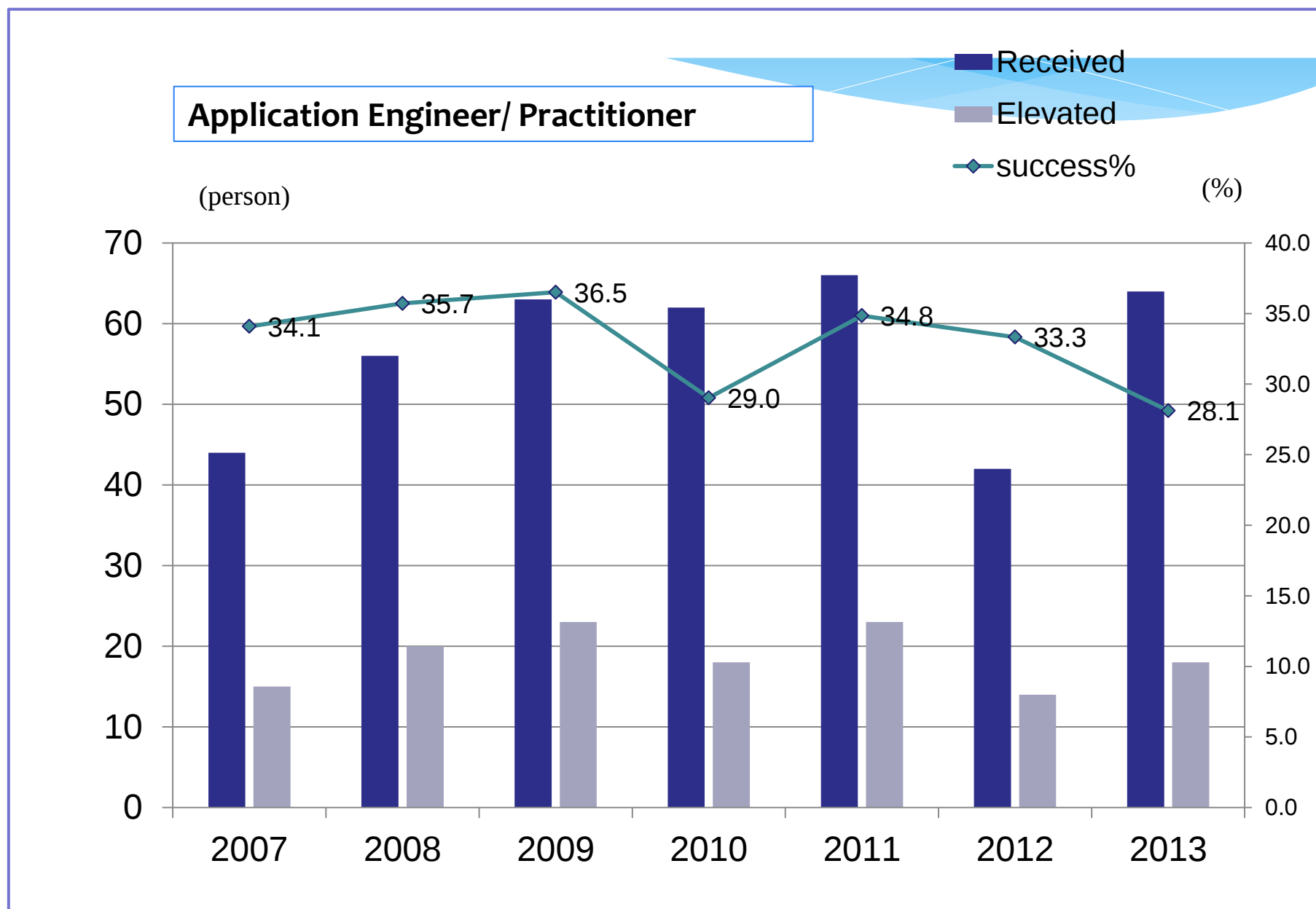


表3-2: 2007至2013領域屬於教育家提名及獲得會士人數

Educator

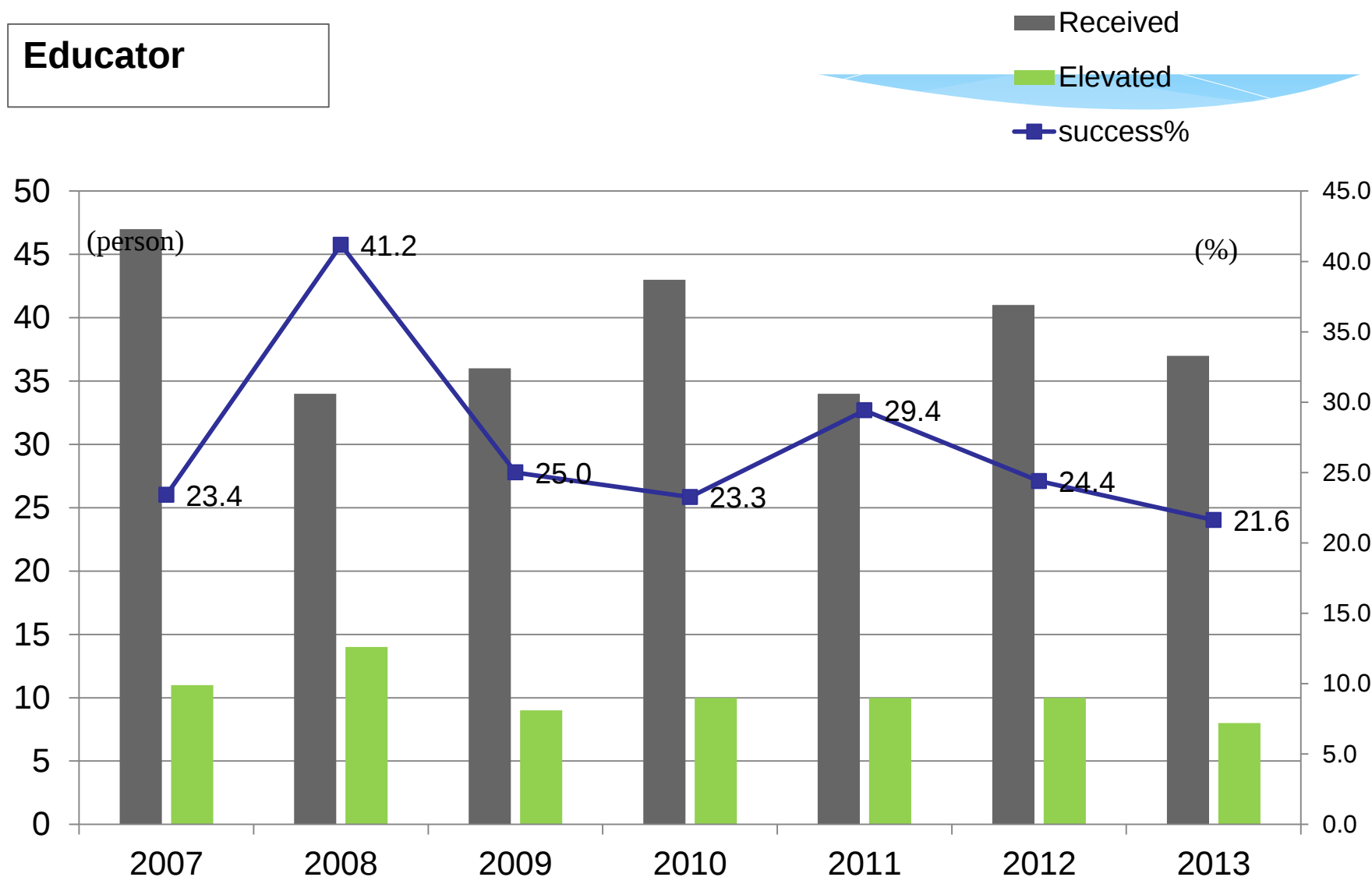


表3-3: 2007至2013年領域屬於技術管理者提名及獲得會士人數

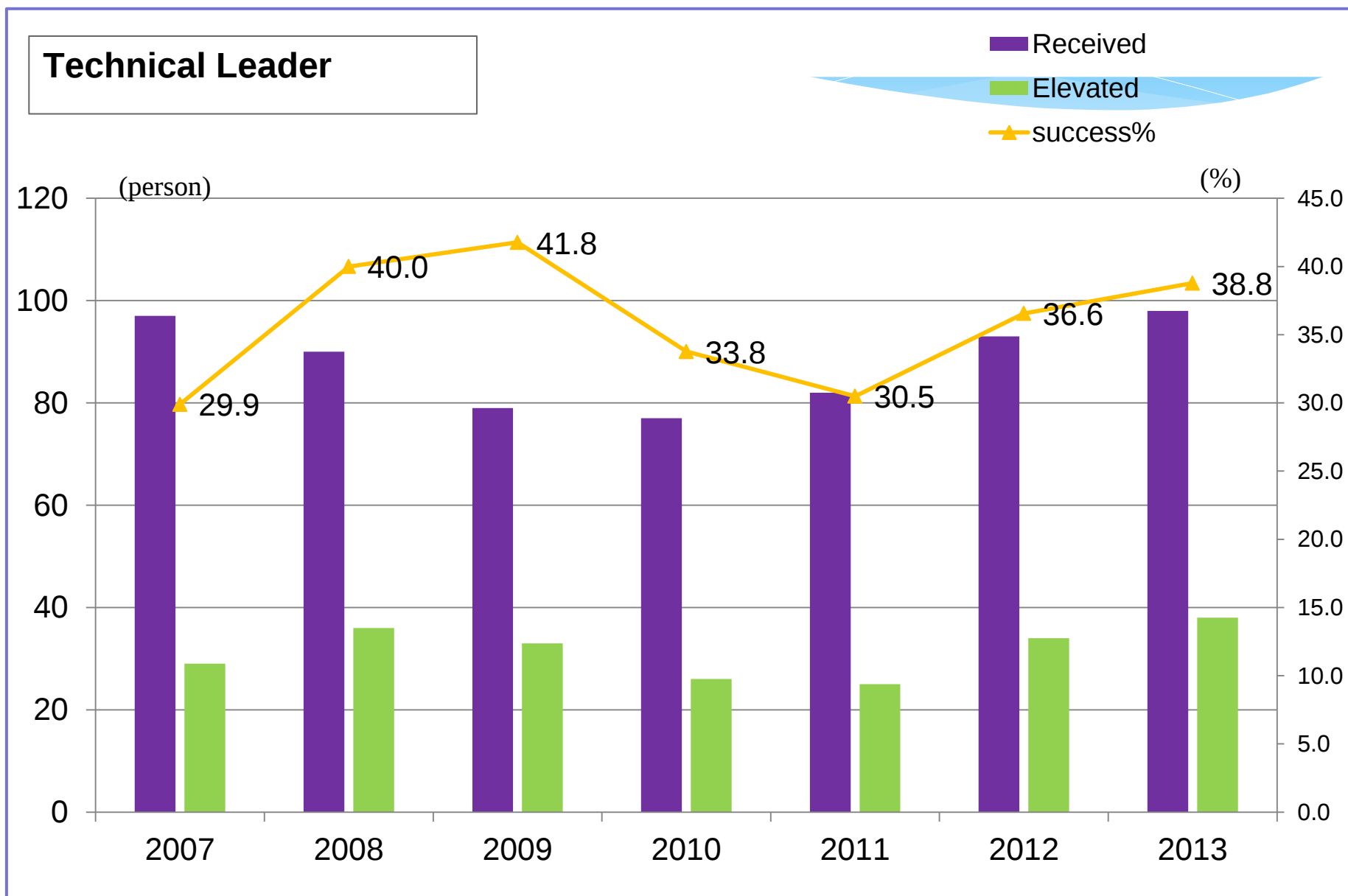
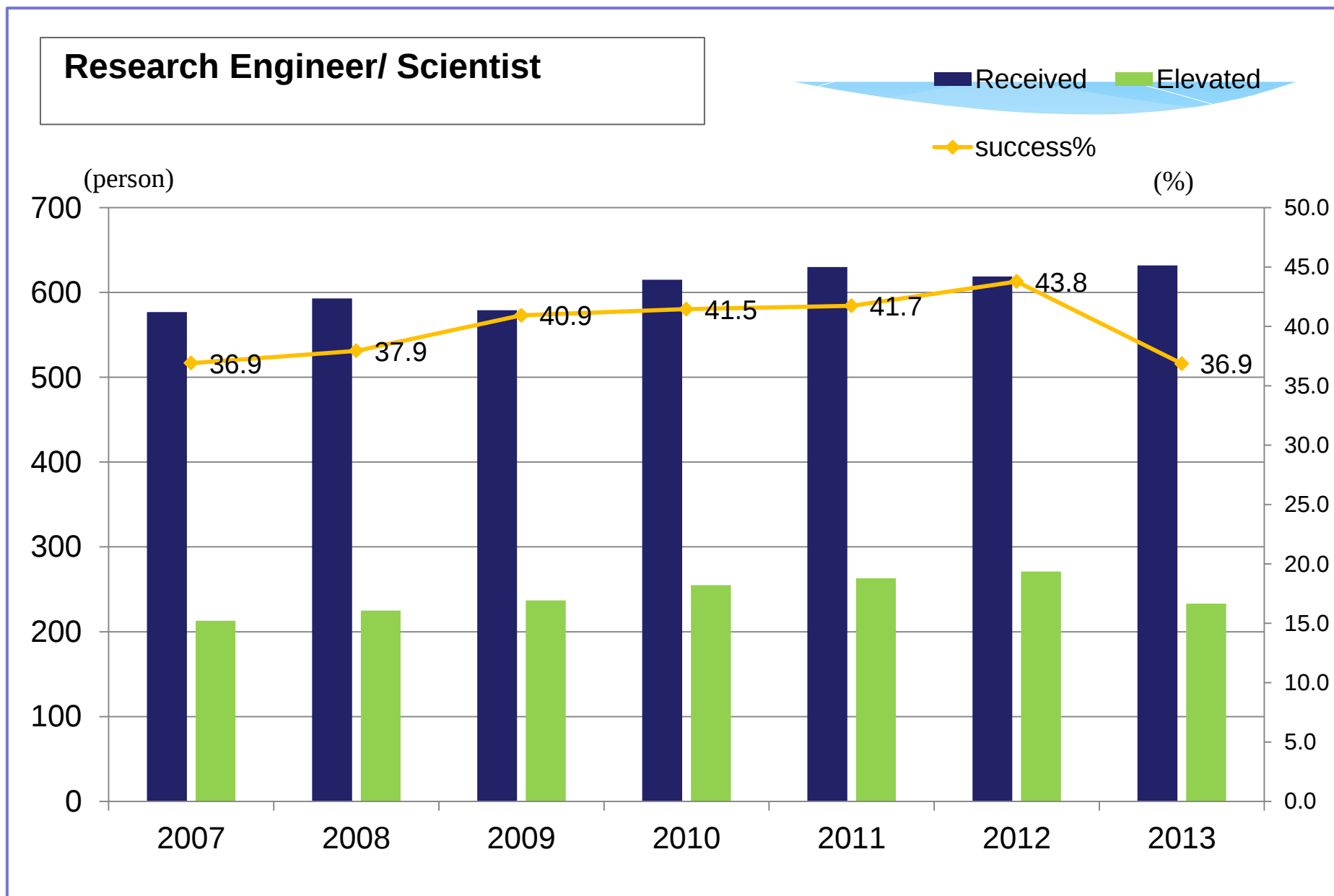


表3-4: 2007至2013年領域屬於研究工程師與科學家提名及獲得會士人數



**表4-1: 1999至2013年IEEE會員屬於亞太地區Region 10提名會士人數
(包含台灣)**

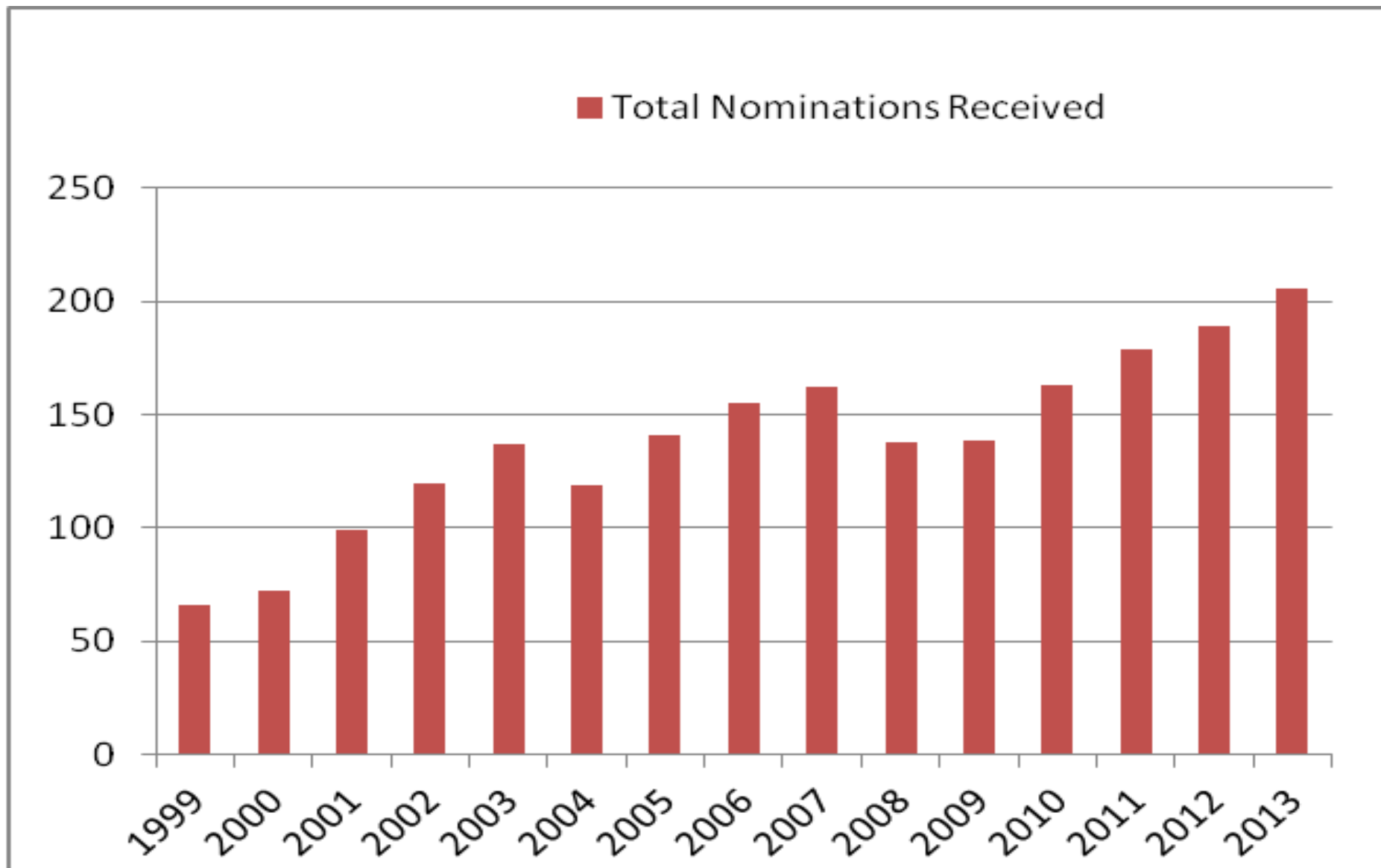


表4-2: 1999至2013年IEEE會員屬於亞太地區Region 10獲得會士人數及成功率(包含台灣)

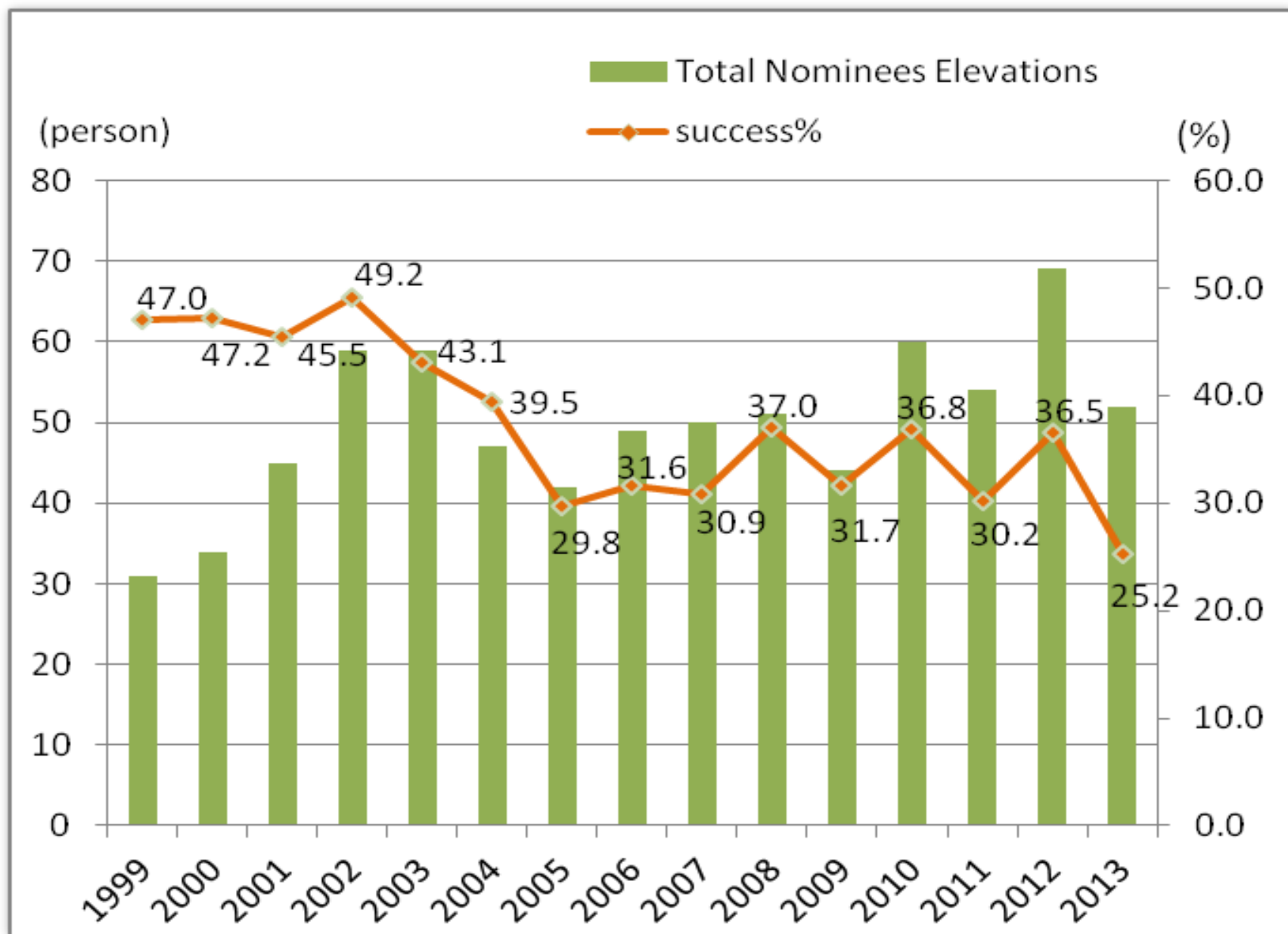


表5-1: 2013年IEEE會員屬教育界、政府單位、工業界及其他提名會
十人數

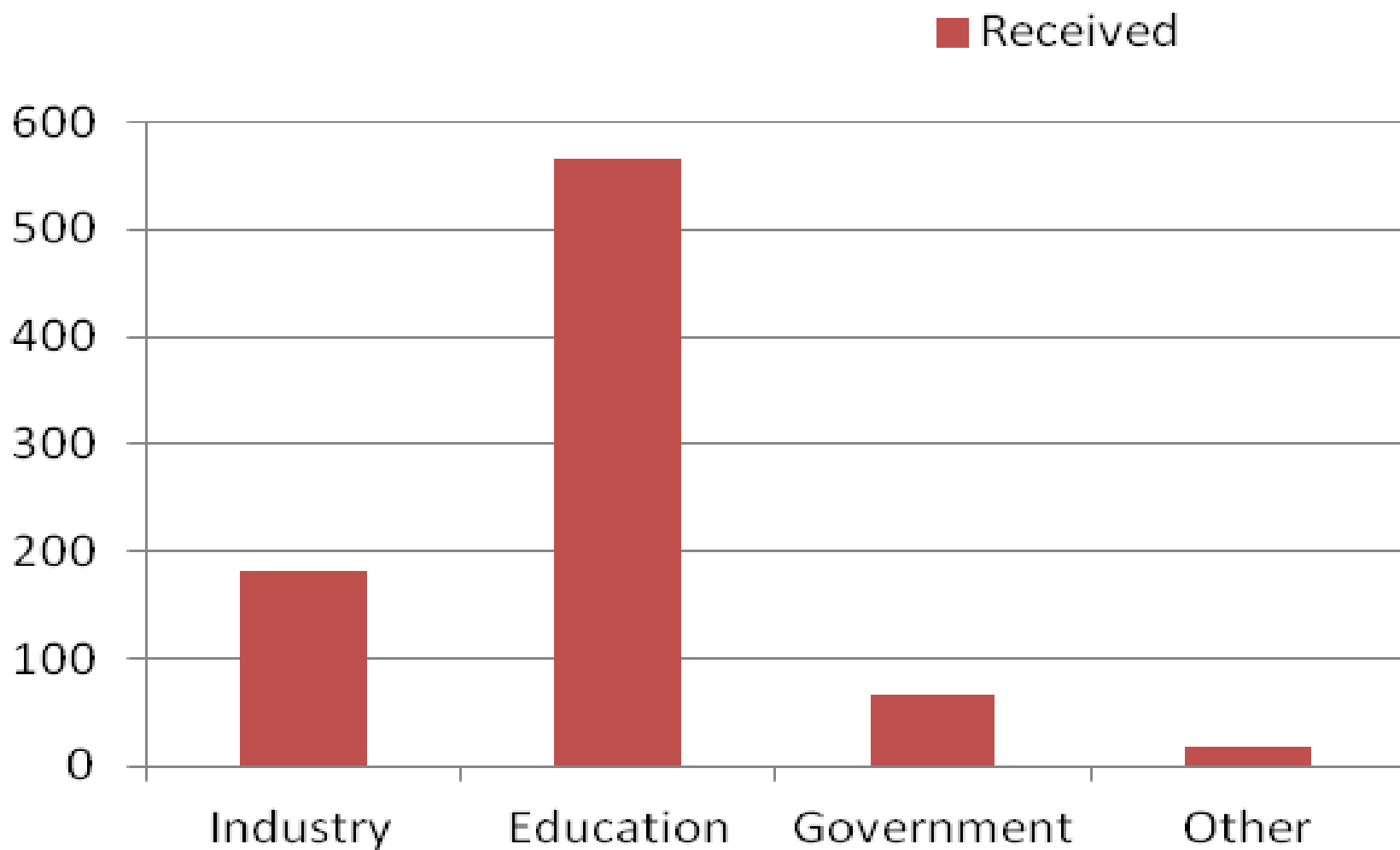


表5-2: 2013年IEEE會員屬教育界、政府單位、工業界及其他獲得會士人數及成功率

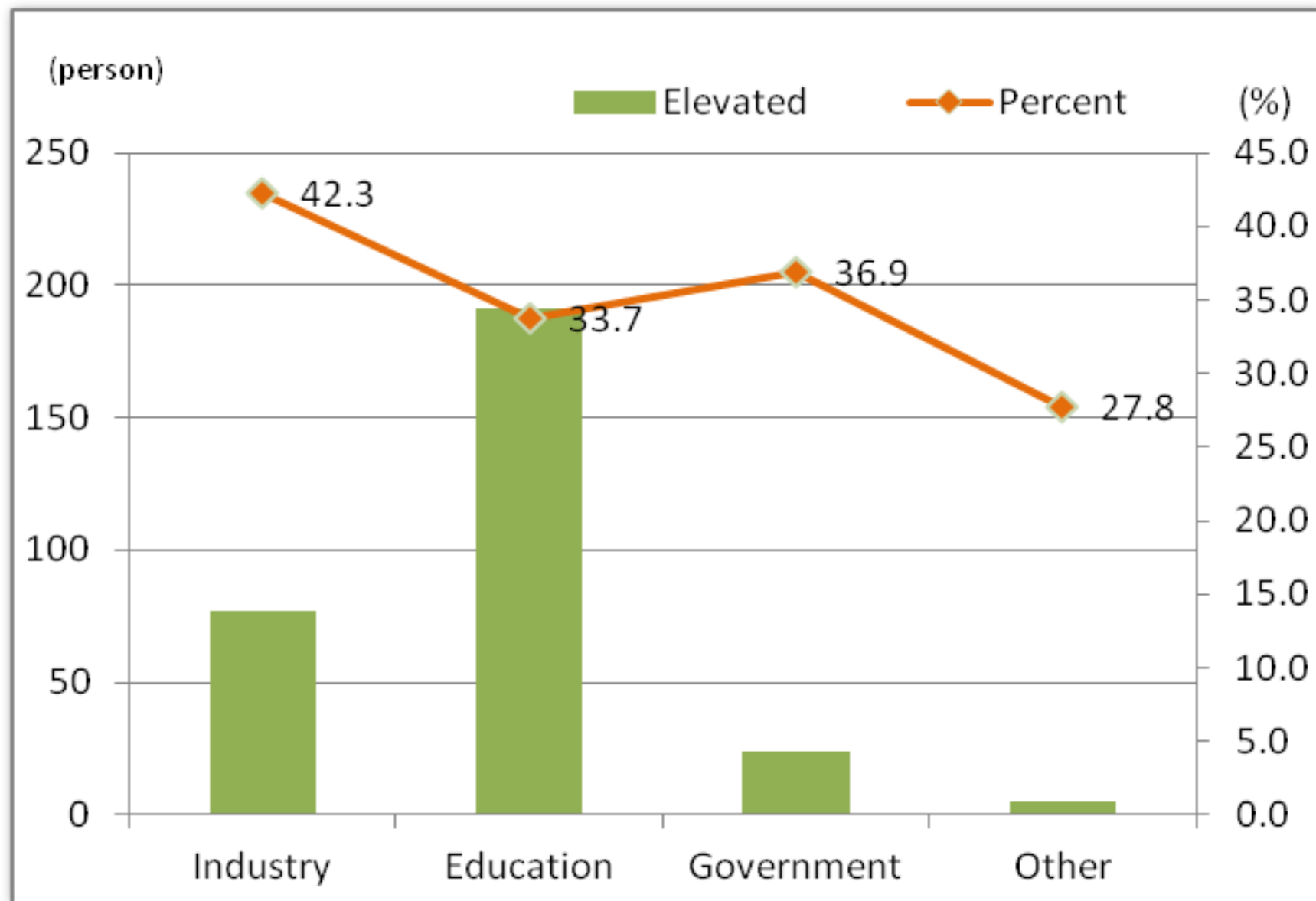


圖1:IEEE地區會員人數統計資料

% of Total Voting Membership

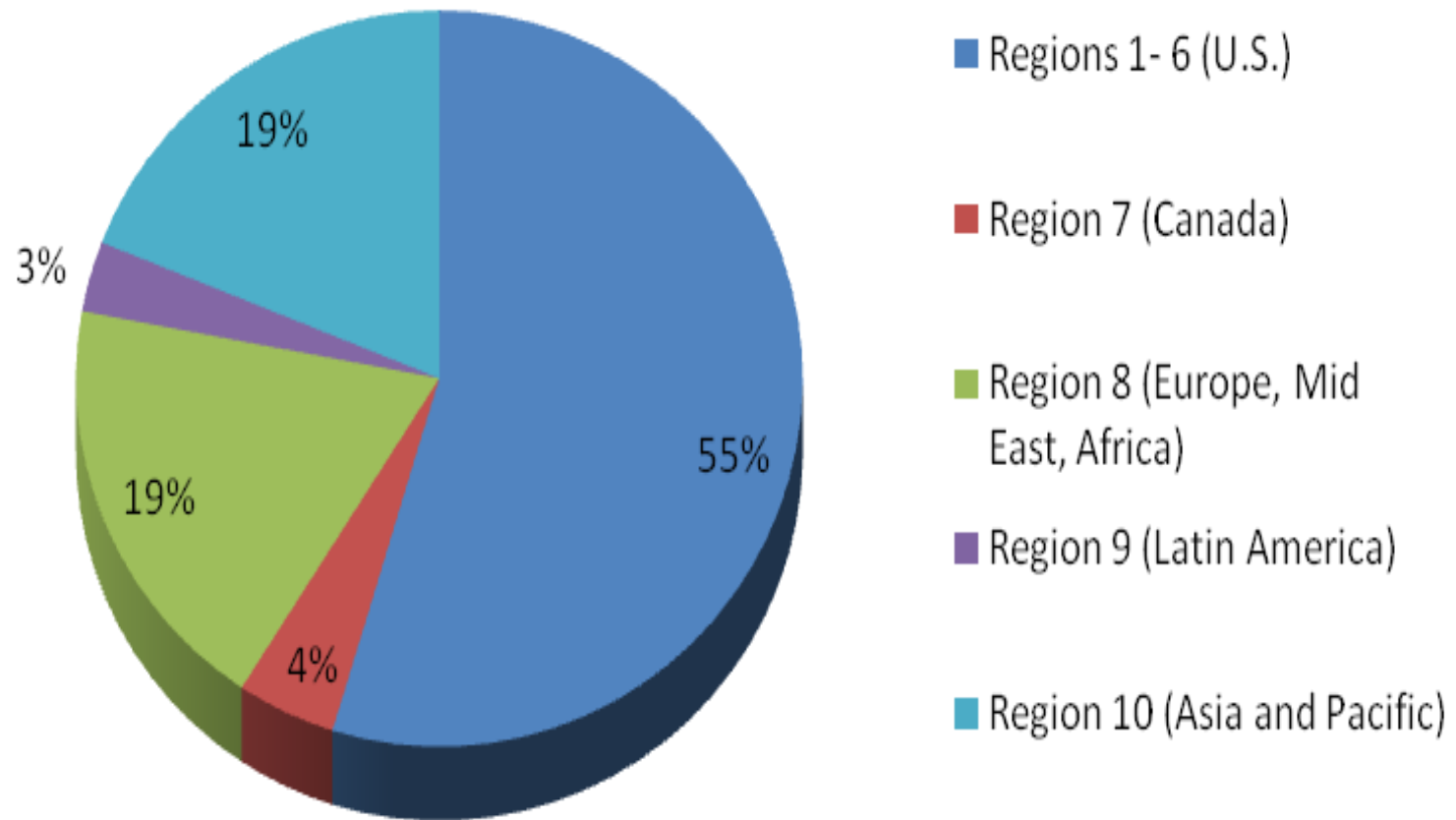


圖2:IEEE地區會員提名會士人數比例統計資料

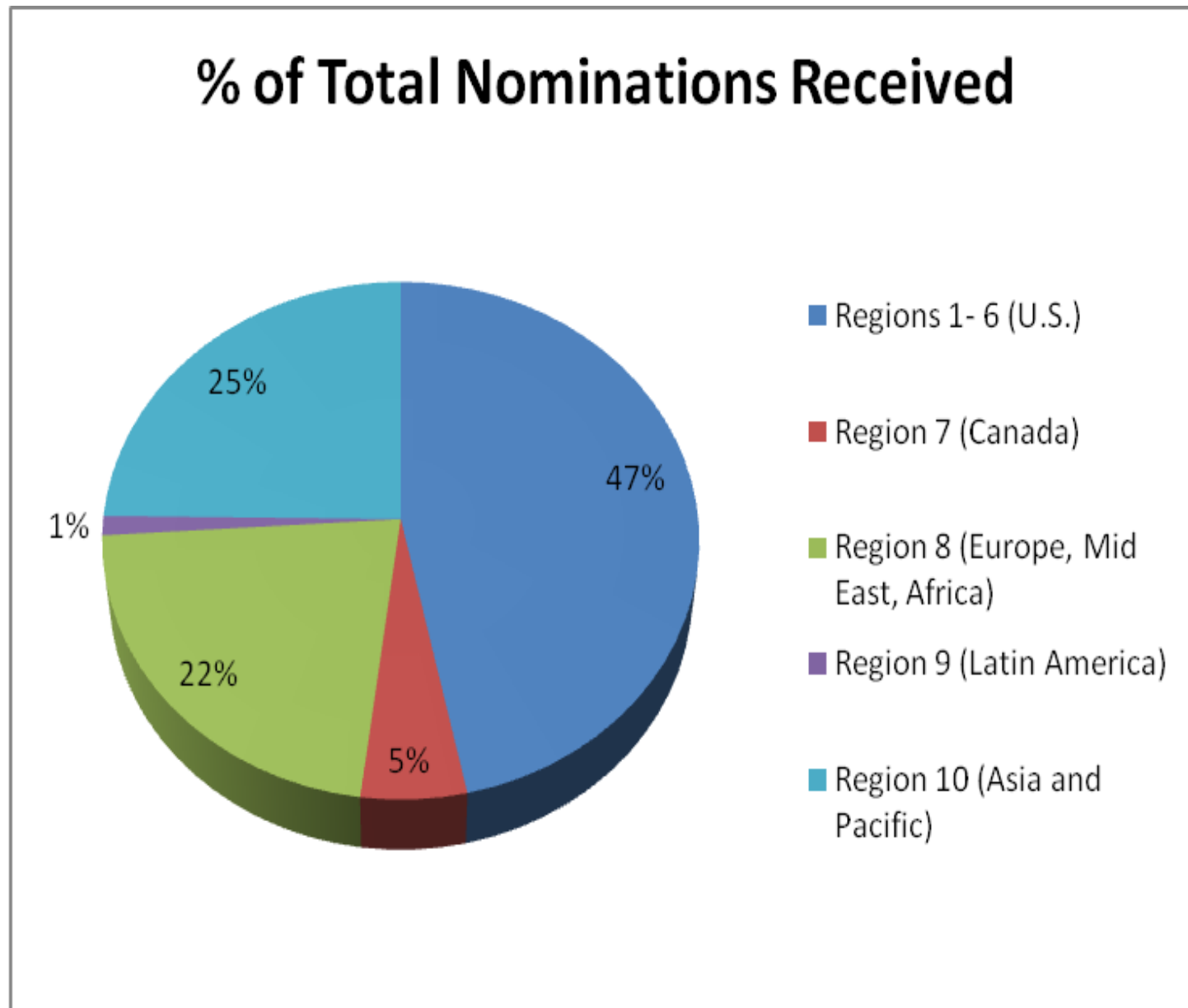


圖3:說明IEEE地區會員獲得會士人數比例統計資料

% of Total Nominees Elevated

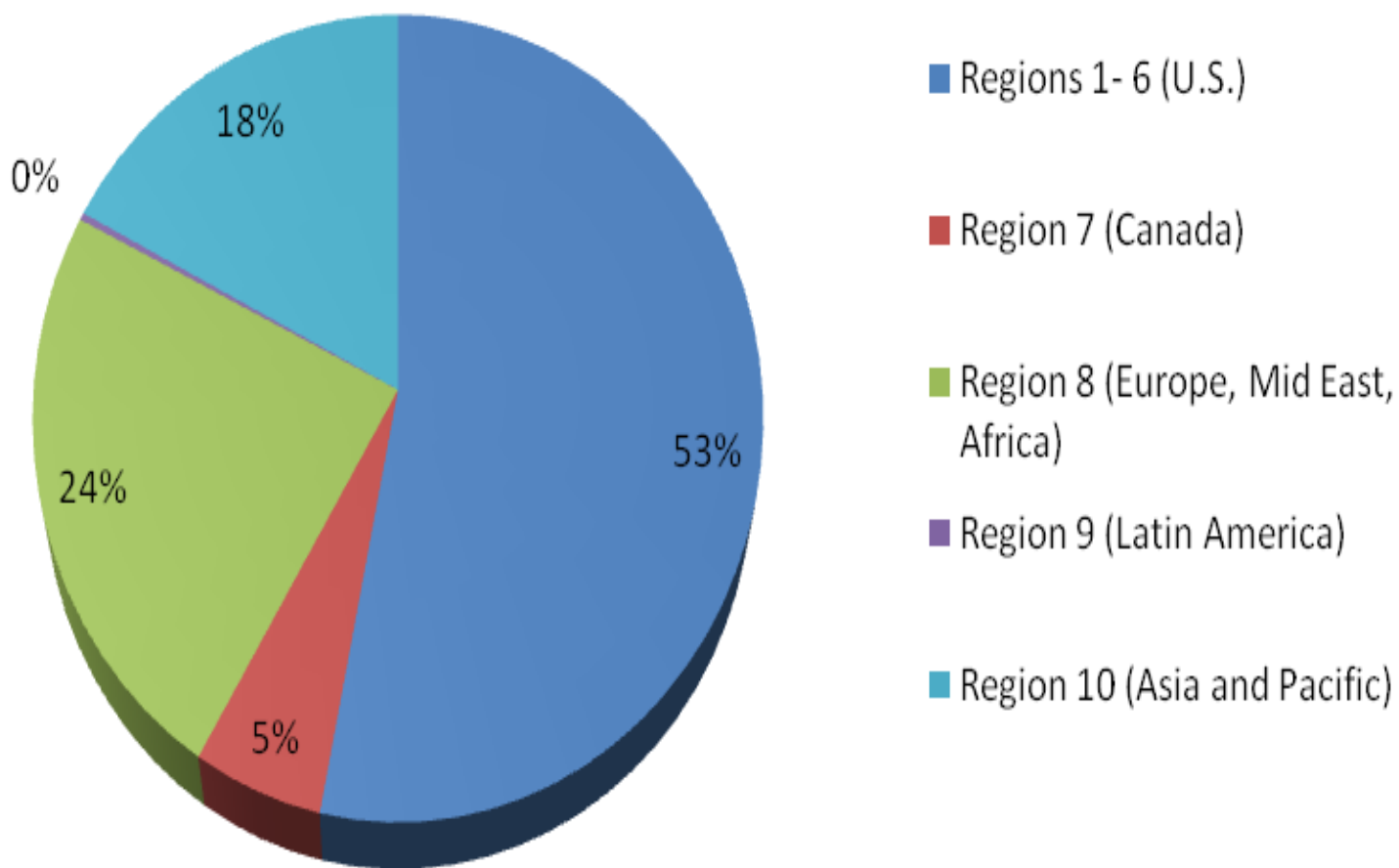


表6-1: 2013年IEEE10個地區會員獲得會士人數統計資料

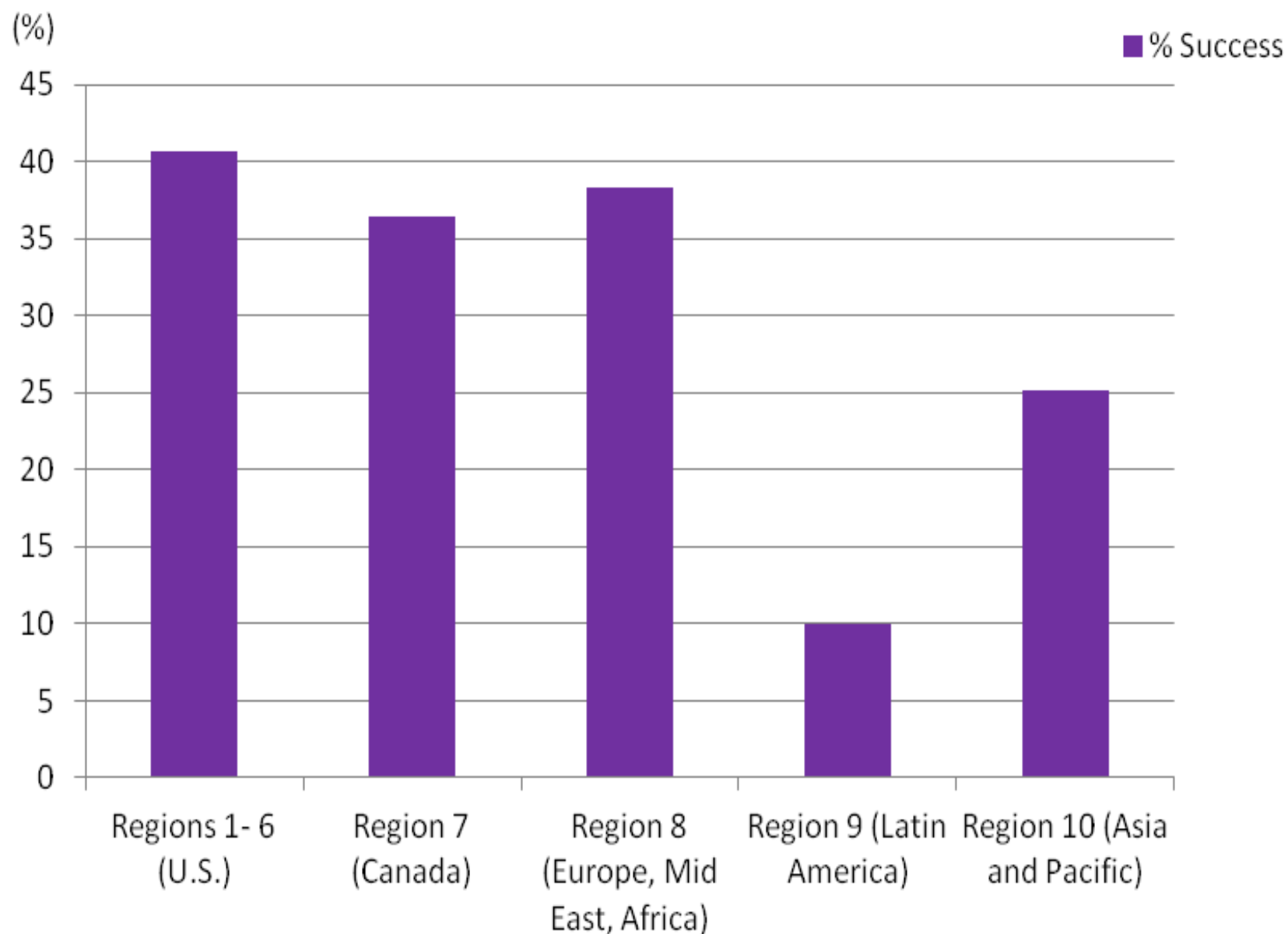
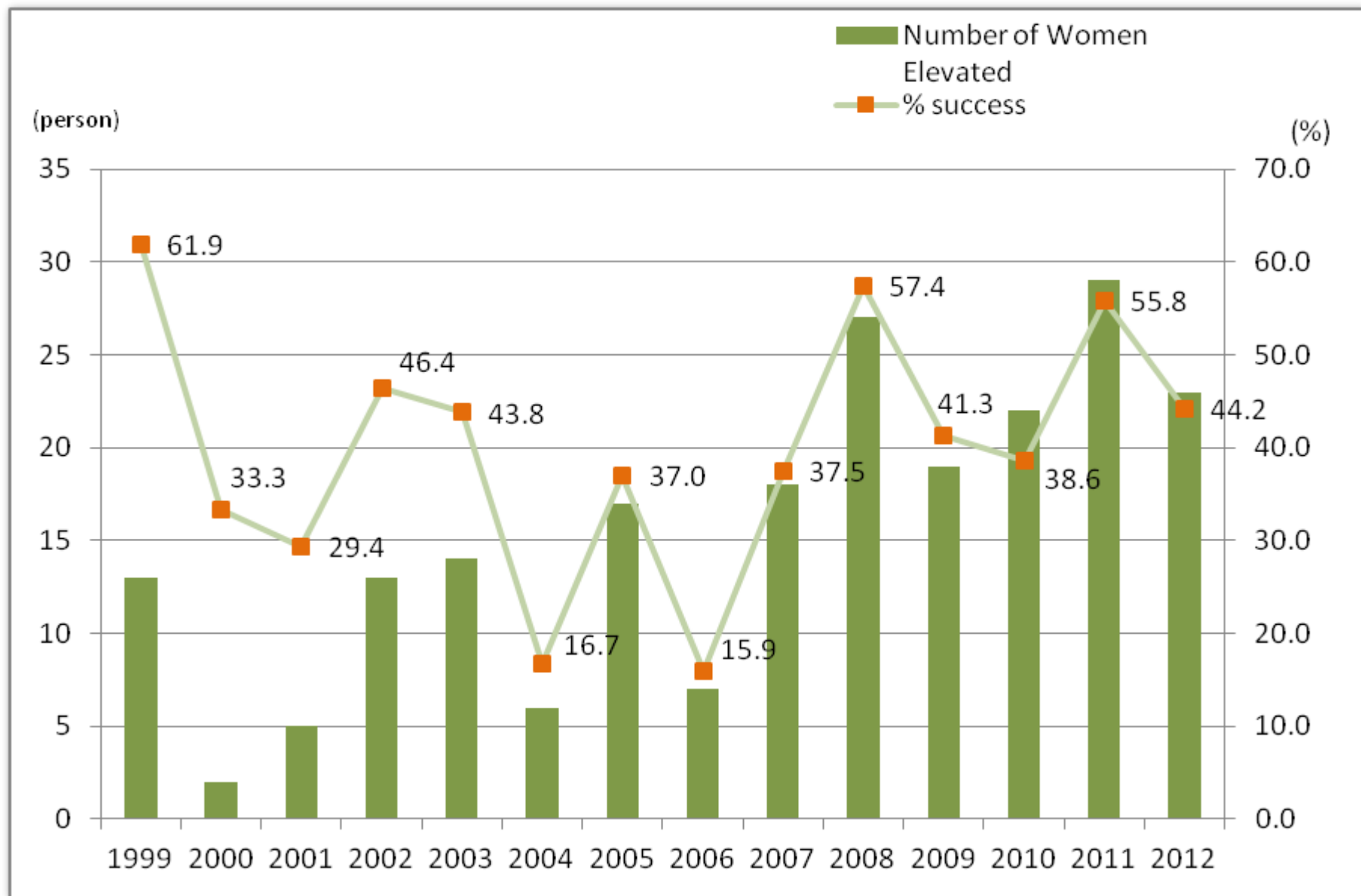


表7-1: 1999-2012年女性獲得會士人數及獲得會士成功率統計資料





Thank you for your attention!

Questions?