CURRICULUM VITAE

1- Civil status

Name: Dr. Ir. Felicien AMAKPE
Nationality : Beninese
Address: Maison Amakpe, Route de Djidja. Cote Palais du Roi Akaba
Abomey Dogueme. BP 388 Abomey, Benin
Tel : +2290195062997. Email : famakpem@hotmail.com
Web site : https://orcid.org/0000000333337278

Military services: Fulfield, senior officer

Profession: Senor Forester officer, Expert in Biodiversity/Biosecurity, bees and pollination pathology and ecology. Senor lecture of the African and Malagasy Council on Higher Education: in Agronomy and Natural Sciences.

Language proficiency

- Fongbe (Benin): mother tongue
- French (international): very good (articles and teaching level)
- English (international): very good (articles and teaching level)

2- Academic achievements

- 2011-2015: Ph.D. Laboratory of Molecular Entomology and Bee Pathology (L-MEB). Department of Molecular Biochemistry and Microbiology. Faculty of Sciences, Ghent University, Belgium.
  Them: Beekeeping potential by the melliferous flora, the honeybee diversity, honey quality and pesticide residues in the Republic of Benin
- 2007-2008: Msc in wildlife and forest management in tropical areas. University of Liège and Gembloux Agro-Bio Tech, Belgium.
- 2007 : Military Training. National Officer School of Toffo, Benin.
- 1997-1999: Agronomy Engineer diploma. Faculty of Agronomic sciences (National University of Benin) and Faculty of Forestry (University of Ibadan, Nigeria).
- 1993-1997 : General Agronomy Diploma, Faculty of Agronomic sciences, Benin.

3- Professional experiences

2016-to now: Ministry in charge of environment and Transport in Benin

- Associate professor at the Laboratory of Applied Ecology, University of Abomey-Calavi.
- National Focal Point of the Convention on Biodiversity in charge of Biosecurity of Benin.
- Lead of the multidisciplinary team in charge of elaborating the biosecurity law and decrees in Benin and analysis their conformity to the ECOWAS regulatory framework
- Member of the steering comity of integrated vector borne control in West Africa
- Manager of the project for implementing the ECOWAS regional biosecurity framework in Benin

2016-2018: Technical Director of the National Centre of GIS and Ecologic monitoring of Benin

2025-to now: Académie des frontières (Benin, France, Afrique)

- Associate trainer of military officers of Benin, Senegal, Djibouti, Guinea Conakry, Tunisia, Gabon, and Maroc in Geoinformatics and geomatic for criminal control at borders
- Trainer of foresters in improvised explosive devices distribution modelling in protected areas

2016 to now: National Universities and military training centre (Benin):

- Instructor on GIS and imbedded systems for biodiversity conservation and security
- Lecturer on land use Land cover dynamics in tropical area
- Lecturer in molecular biology and sequencing
- Lecturer on scientific communication and reporting
- Lecturer on bees and pollinator conservation in tropical areas
- Instructor of design, implementation and Monitoring/Evaluation of conservation, development and research projects
- Coaching and supervising students and officers master and field works

2018-2020 with SOGEOA SATOM Benin and QuarryLife / HeidebertCement Benin

- Elaboration of Post extraction management plans of industrial limestone quarries in Benin
- Consultant on Environnement label during road building project in Benin
- Research on the on contribution of quarries to biodiversity conservation in Benin.

2012 to 2018 at Gent University:

- Molecular characterization of native honeybees and their enemies in Benin
- Artificial queen rearing and honeybee colonies production in tropical area
- Pollinator habitat ecology in tropical area

2013-2017: Rotary Club International and Association des Apiculteurs de Togo

- Consultant for elaborating and implementing the poverty alleviation strategies by beekeeping in the villages of Kuma and Elavagnon of Togo

2007-2008 : European Union, CISV, Municipality of Tintigni (Belgique) and Cercle Nature et Développement (CENAD-NGO)

- Design of the urbanization plan of the district of Djidja (Benin)
- Design of the waste management plan of the cities of Bohicon (Bohicon)

4- Relevant International achievements

1- **WHO/AUDA/NEPAD Accra (Ghana), 2026:** Expert for Piloting the WHO-OECD implementation Toolkit for the Anticipatory Governance of Emerging Technologies in a Public Health Context and progressing towards a regional governance roadmap.

2- **FAO, Rome Italy, 2024:** Expert on developing a methodology for headline indicator 7.2 under the monitoring framework of the Kunming-Montreal Global Biodiversity Framework

3- **Montreal Canada, 2019:** Member of the ATHEG: Report of the AD-HOC Technical Expert Group on Synthetic Biology, Montreal, Canada, 4-7 June 2019

4- **2017-to 2020: Massachusetts Institute of Technology (USA) NASA Goddard Space Flight Centre (USA), Space Science and Technology Institute (Ghana):** Focal point for the project: Designing applications to foster the health of terrestrial and wetland ecosystems in the coastal zone of West Africa

5- **2011 to 2019: International Foundation for Sciences (IFS) and Cercle Nature et Developpement (CENAD-NGO):** Chief Investigator on the research projects B/5113-1: The study of the ecological adaptation of the honey bees *Apis mellifera adansonii* in the republic of Benin and the project B/5113-2: Study of the impact of the seasons on artificial queen rearing of the benino-soudanian *Apis mellifera Adansonii* ecotype in the republic of Benin (West Africa).

6- **2019: CLACIM Benin, HeidelbertCement and CENAD-NGO:** Manager of the project: Post Extraction management and security at the lime quarry of Fongba (Republic of Benin) and Pollinator conservation for poverty alleviation:

7- **2010: Municipalities of Djidja (Benin), Tintigny (Belgium) and CENAD-NGO:** Chief Investigator of the project : Elaboration du plan foncier urbain de la commune de Djidja (Benin) : dimensionnement des infrastructures sociocommunautaires et voiries urbaines.

5- Main additional professional capacity strengthening

- **October 2026,** Erevan, Armenia: Biosafety and risk assessment training workshop. CBD
- **September 2022,** Dakar (Senegal) Risk Assessment and Risk management by the Executive Secretariat of the CBD
- **July 2019, Addis Ababa** (Ethiopia): International training on Genome editing. By the United Nation Training Agency and NEPAD.
- **June 2019: Member of the Adoc**
- **July 2019, Cotonou (Benin):** Formation à l'utilisation des outils de suivi et d'observation de la terre. GIZ, Federal Ministry of Economic Cooperation and Developement (Germany)
- **September 2018, Addis Ababa (Ethiopia):** Training on International negotiation for sustainable biosafety. By the United Nation Training Agency and NEPAD.
- **January 2018, Bramen (Germany) and Brussels (Belgium):** Earth Observation for land use and land cover dynamic in Africa. By GIZ and AirBus.
- **November 2017 University of Accra Ghana:** Copernicus International Training on Marine Data stream for Ocean Applications and security in Africa. Eumetsat Training.
- **2011-2016, Laboratory of Molecular Entomology and Bee Pathology, Departement of Molecular Biotechnology and Microbiology, Ghent University, Belgium):** Molecular entomology, Bee pathology and applied ecology for sustainable development.
- **2007-2008, University of Liege and Gembloux Agro-Bio Tech (Belgium):** Forests and Biodiversity management, Data base and biostatistics, earth observation for natural resources management.
- **April-July 2006 Laboratory of Zoophysiology and Bee Pathology. Gent University, (Belgium):** International training on beekeeping for poverty alleviation.
- **March-Jun 2004 Faculty of Agronomic Sciences of Gembloux (Belgium):** Development and conservation project Design, Management and Monitoring/Evaluation.

6- Main fields of competence

1- Land use land covers in tropical areas
2- Pesticide impacts on biodiversity
3- Modern Biotechnology and Bio safety in Africa;
4- Risk assessment
5- GIS for Natural Resources Management
6- Bee and pollination pathology and ecology
7- Conservation and development projects management
8- Biodiversity and natural resources management
9- Earth observation and geospatial analysis;
10- Forest and wildlife management.

7- Reviewer experiences

- 1 Reviewer at HELIYON journal. https://www.editorialmanager.com/heliyon/default2.aspx
- 2 Reviewer at Science of the Total Environment. https://www.editorialmanager.com/stoten
- 3 Reviewer at the British Ecological Society (https://www.britishecologicalsociety.org)
- 4 Reviewer at Journal of Materials Science and Surface Engineering (http://www.jmsse.in)
- 5 Reviewers at *Journal of Apicultural Research (*https://www.editorialmanager.com/TJAR)
- 6 Reviewer at the International Journal of Environmental, Cultural, Economic and Social Sustainability, Common Ground Publishing LLC. (https://publish.illinois.edu)
- 7. Scientific African: https://www.sciencedirect.com/journal/scientific-african

8- Main publications

ORCID: https://orcid.org/0000-0003-3333-7278

Research gate: Felicien Amakpe

Google schoolar profile:

https://scholar.google.com/citations?view_op=list_works&hl=en&authuser=4&user=z10iC-sAAAAJ

scopus prifile: https://www.scopus.com/authid/detail.uri?authorId=56986554100

web of science ID: AAI-8332-2020

Published articles

1. Bedjrenou G, Gbetoho M, Amakpe F. Achgan Dako EG, et al. 2026. Toward omics-based breeding strategies for the Shea tree (Vitellaria paradoxa C.F. Gaertn.). Current Plant Biology 48:100632; 1-15. DOI: 10.1016/j.cpb.2026.100632
2. Amakpe F, Sinsin B, Mensah GA, Agbangla AC. 2026. Quelle biosécurité pour les abeilles et pollinisateurs dans l'espace CEDEAO à l'ère des OVM agricoles et de lutte antivectorielle? Actes de l'Atelier Scientifique National (édition 2025). Institut National des Recherches Agricole du Bénin les 5, 6 et 7 novembre 2025]. DOI : 10.62344/brab.v34i04.250 ISBN : 978-99982-74-55-6 Dépôt légal N° 18233 du 13 février 2026, Bibliothèque Nationale du Bénin (BNB), 1er trimestre
3. Amalia CA, Amakpe F, Azzahra HR, Hasanah DN, Putri VK, Ati AS, Ramadan AD, Shanida SS, Kusmoro J, Hermawan W, Wulandari I, Husodo T .2025. Pollen source diversity in Apis cerana beekeeping around Ir. H. Djuanda Grand Forest Park, West Java, Indonesia. Biodiversitas Journal of Biological Diversity Vol 26, 11., 5405-5422
4. Amakpe F, Chemurot M, Brice B, 2025. Dynamique temporelle des activités alternatives génératrices de revenus : Cas des initiatives apicoles au Bénin. Cahiers Agricultures, vol 35, 1, 1-11; https://doi.org/10.1051/cagri/2025039
5. Amakpe, F, Amalia,CA, Sinsin B, Fandohan AB. 2025. Spatio-temporal distribution of native melliferous trees under climate change in Benin: Implications for apiculture and pollinator

conservation. Asian Journal of Forestry. Volume 9, Issue 2 December 2025, 264-272 DOI: 10.13057/asianjfor/r090208.

6. Amakpe, F., Chemurot, M., & Sinsin, B. (2026). Dynamique temporelle des activités alternatives génératrices de revenus: cas des initiatives apicoles au Bénin. *Cahiers Agricultures*, *35*, 1. DOI : https://doi.org/10.1051/cagri/2025039
7. Amakpe F, Sinsin B. 2025. Social drivers of colony collapse disorder in Benin's beekeeping, West Africa. Asian J. Agric 9(2): 391-401. DOI : 10.13057/asianjagric/g090206
8. Amakpe F, Amalia CA, Seke Yerima S, Sinsin B, Mensah GA, Fandohan AB. 2025. Climate Change Impacts on Apis mellifera L (1758) Niche in Benin: Restriction and Shift of the potential distribution ranges of adansonii, scutellata and iberiensis races. MSI Journal of Multidisciplinary Research (MSIJMR), Volume 2(Issue 9), 01-29. https://doi.org/10.5281/zenodo.17043966
9. Amakpe F, Savadogo M, Biaou, H, Agbomahena, MB. 2025. Roadside invasive Hyptis suaveolens ((L.) Poit, 1806) colonies green energy potential in the soudano-guinean regions of Benin. *Sciences et Technologies pour l'Agriculture Durable*, *4*(4), 155-167. **DOI :** https://doi.org/10.2021/d46t6g54
10. Gebremedhn, H., Lefebre, R., Chemurot, M., Amakpe, F., Amssalu, B., De Smet, L., & de Graaf, D. C. (2025). Occurrence and allele frequencies of genetic variants associated with Varroa drone brood resistance (DBR) in African Apis mellifera subspecies January 2025 Journal of Invertebrate Pathology 209(31):108276. DOI: 10.1016/j.jip.2025.108276.
11. Amakpe F., Kenali I., B. Sinsin. 2024. A Melissopalynologic dynamics appraisal revealed the strategic foraging adaptation of the honeybees (Apis mellifera Linnaeus 1758) to the anthropogenic impacts in the Republic of Benin. Heliyon 10 (2024) e33753. https://doi.org/10.1016/j.heliyon.2024.e33753
12. Amakpe F., Kenali I., Sinsin B. 2024. Vulnérabilité et éfondrement du secteur apicole en Républque du Bénin : le pillage des ruchers dans les départements méllifère. Colloqe Scientifique international sur Politiques publiques agricole et rôles des collectivités territoriales dans la sécurité alimentaire et nutritionnelle en Afrique : quel levier de perspectives ? 23 au 25 juillet 2024. Université d'Abomey Calavi.
13. Amakpe F. Kolawole V. Sinsin B., de Graaf D. C., Glele-Kakai R. 2023. Profil des prises en charge des envenimations en milieux ruraux : une préférence aux guérisseurs endogènes excepté les cas dus aux abeilles mellifères (Apis *mellifera Linné, 1758*) dans la Commune de Djidja, République du Bénin. *Ann. Afr. Med*., *vol*. 17, *n*° 1. *e5451-e5467* https://dx.doi.org/10.4314/aamed.v17i1.3 .
14. Felicien Amakpe, Dirk De Graaf, Brice Sinsin, Honore S. Biaou 2023. Buzzing opportunities: Integrating apitourism for enriching the tourism heritage of the Republic of Benin. Global Glob. j. manag. bus. res. Vol 23 N°F3. 1-13. Doi https://doi.org/10.34257/GJMBRFVOL23IS3PG1
15. Felicien AMAKPE, Dirk C. DE GRAAF, Brice SINSIN Honore S. BIAOU. 2023 Stem cutting assessment for domesticating the medicinal melliferous plant Combretum micranthum G. Don. In the Republic of Benin. *Net Journal of Agricultural Science* Vol. 11(1), pp. 1-12, DOI: 10.30918/NJAS.111.23.003

16. Felicien AMAKPE, Goergen GEORG, Apollinaire MENSAH, Lina DE SMET, Dirk C. DE GRAAF, Guy, Brice Augustin SINSIN, 2019 Bees and associated insects diversity and melliferous plants potential at the industrial lime quarry of Fongba in Republic of Benin. Bulletin de la Recherche Agronomique du Bénin (BRAB), Numéro Spécial Développement Agricole Durable (DAD) – Août 2019, http ://www.slire.net&http ://www.inrab.org. pp. 54-69
17. Amakpe F. De Smet L., Brunain M., Jacobs J. F., Sinsin B., De Graaf D; C. 2018 Characterization of the native bee subspecies in Republic of Benin using morphometric and genetic tools. Journal of Apicultural Sciences. DOI 10.2478/JAS-2018-0006.
18. Amakpe F., Akouehou G. S., de Graaf D. C., Sinsin B. 2015 Determination of the silvo-melliferous regions of Benin: a nationwide categorisation of the land based on melliferous plants suitable for timber production. Journal of Agriculture and Rural Development in the Tropics and Subtropics 116 (2): 143–156.
19. Amakpe F., De Smet L., Brunain M., Ravoet J., Jacobs F. J., Reybroeck W., Sinsin B., de Graaf D; C. 2015 Discovery of Lake Sinai Virus and an unusual strain of Acute bee paralysis virus in West African apiaries. Apidologie INRA, DIB and Springer-Verlag France. DOI: 10.1007/s13592-015-0372-z.
20. Amakpe F. 2010 The Biodiversity of the Honey Bees (*Apis Mellifera Adansonii*) in the District of Djidja, Republic of Benin. Int J Environ Cult Econ Soc Sustain. Common Ground Publishing LLC 6:(6), 90-104..

Five key Book *chapters*

1- Felicien AMAKPE, Sinsin B, Hornick JL, Jacobs FJ, Dirk C. de Graaf, 2028 Alimentation spéciale en apiculture. Bibliothèque Nationale du Bénin. Bibliothèque Nationale du Bénin, Dépot légal : 10884 du 12/12/2018, 4ème Trimestre ISBN 978-99919-0-000-12
2- Felicien AMAKPE, de Smet L, Sinsin B, Jacobs FJ, de Graaf DC, 2018. Les Eco-Morpho-génotypes des abeilles mellifères en République du Bénin. Bibliothèque Nationale du Bénin, Dépôt légal : N° 10885 du 12/12/2018 4ème trimestre, ISBN : 978-9999-0-000-13
3- Félicien AMAKPE, Brice Sinsin, Dirk C. de Graaf 2019. Les régions sylvo-mellifères pour une apiculture durable en République du Bénin. Bibliothèque Nationale du Bénin. Bibliothèque Nationale du Bénin, Dépôt légal : N° 10886 du 12/12/2018, n, 4ème Trimestre, ISBN :978-99919-0-000-4.
4- AMAKPE F, de Smet L, Sinsin B, Hornick JL, Jacobs FJ, de Graaf DC, 2019. Epidémiologie et ennemis des abeilles mellifères en République du Bénin. Bibliothèque Nationale du Bénin. Dépôt légal : N°11515 du 07/08/2019. 3ème Trimestre 2019 ISBN : 978-99982-0-113-2.
5- AMAKPE F, de Graaf DC, SINSIN BA, Biaou HS, 2023 Multiplication végétative de tiges du Combretum micranthum pour la promotion des essences mellifères médicinales Bibliothèque Nationale du Bénin, Dépôt légal : 15539 du 12 décembre 2023 ; ISBN : 978-

Five key Communications, Conferences *and symposiums*

1- Cotonou (Benin), 2026. Cadre législatif et règlementaire de développement et d'utilisation des biotechnologies modernes au Bénin. Atelier de réflexion stratégique sur l'utilisation des

technologies innovantes de contrôle de moustique pour l'élimination du paludisme ; 20-21 August 2026. At Cotonou, Benin.

2- **Accra (Ghana), 2026:** Piloting the WHO-OECD implementation Toolkit for the Anticipatory Governance of Emerging Technologies in a Public Health Context and progressing towards a regional governance roadmap. Afro regional workshop on the Governance of Emerging Genetic Biocontrol agents. 12 and 12 may 2026 in Accra Ghana

3- ***APIMONDIA Copenhagen Danmark,*** **2025 :** The apitourism regions for boosting the tourism heritage of the Republic of Benin. *APIMONDIA 2025 –Sweden/*Danmark*/Norway 23-27 September 2025*. *9th* APIMONDIA *2025. Bee United in Scandinavia. Copengagen Danmark – APIMONDIA, 1-235.*

4- **Ketou (Benin), 2025 :** Cadre législatif et règlementaire de développement et utilisation des organismes vivants modifiés et produits dérivés en République du Bénin et dans l'Espace CEDEAO. Journées de partage des résultats de Recherche et d'Innovation autour du thème «Organisme génétiquement modifié » 2 au 6 juin 2025 à l'Université de Ketou, Bénin

5- **Abomey-Calavi (Benin), 2025 :** Quelle biosécurité pour les abeilles et pollinisateurs dans l'espace CEDEAO à l'ère des OVM agricoles et de lutte antivectorielle ? Atelier Scientifique National (Edition 2025) : La recherche agricole comme instrument de développement économique et social du Bénin. INRAB les 5, 6 et 7 novembre 2025. DOI : 10.62344/brab.v34i04.250.

6- **Sakete, Benin 2024:** Logiques des prises en charge endogène ou médicale des envenimations dans la commune de Djidja. Deuxième colloque scientifique international. Agroécologie et Développement Durables en Afrique, Sakété du 26 au 29 novembre 2024.

7- **Montreal Canada, 2019:** The Morpho Genotypes of the native honeybees in the Republic of Benin. Poster number P.02.31 presented at the 46th Apimondia International Apiculture

9- Network and Associative life

1- Member of the British Ecological Society
2- Lecturer staff of the University of Abomey-Calavi (Benin)
3- Member of the West African Biosafety Expert Committee;
4- Member of the steering committee of the West Africa Integrated Vector Management Programme
5- Member of the beekeeper association of the Republic of Benin
6- Member of the scientific committee of Cercle Nature et Developpement (CENAD-NGO)

10- References / research collaborators

1- Prof Brice Sinsin, Rector of University of Abomey Calavi co-supervisor for my PhD researches. Email : bsinsin@gmail.com
2- Prof Dr. Dirk Degraaf. Head of Laboratory of Molecular Entomology and Bee Pathology (Gent University Belgium) Promoter of my PhD researches. Email : dirk.degraaf@ugent.be

I herein declare out of honour that all the information given above is true.

November 2026

Felicien AMAKPE (PhD)