Ο Χαράλαμπος Δημουλιάς γεννήθηκε στη Κατερίνη (23/07/1961) και μεγάλωσε στον Μακρύγιαλο Πιερίας. Απέκτησε το Δίπλωμα του Ηλεκτρολόγου Μηχανικού από το Τμήμα Ηλεκτρολόγων Μηχανικών (ΤΗΜΜΥ) του ΑΠΘ το 1984 και το Διδακτορικό του από το ίδιο τμήμα το 1991.

Μετά την ολοκλήρωση της στρατιωτικής του θητείας συνίδρυσε (1992), την εταιρεία συμβούλων Alteren ΑΕ στα πλαίσια της οποίας δραστηριοποιήθηκε σε μελέτες, κατασκευές και επιβλέψεις έργων:

- εξοικονόμησης ηλεκτρικής ενέργειας,
- αυτόνομων, υβριδικών και διασυνδεδεμένων φωτοβολταϊκών συστημάτων,
- φίλτρων αρμονικών ρεύματος,
- αποθήκευσης ηλεκτρικής και θερμικής ενέργειας,
- σχεδιασμού και ελέγχου συστημάτων φωτισμού και
- συμβατικών ηλεκτρομηχανολογικών εγκαταστάσεων.

Η πανεπιστημιακή του σταδιοδρομία ξεκίνησε τον Νοέμβριο 2002 όταν εξελέγη Λέκτορας στο ΤΗΜΜΥ. Σήμερα είναι Καθηγητής Ηλεκτρικής Ενέργειας-Ποιότητας Ισχύος στο ΤΗΜΜΥ όπου διδάσκει τα μαθήματα, Ηλεκτρονικά Ισχύος Ι, Ηλεκτρονικά Ισχύος ΙΙ, Ηλεκτρικές Μηχανές (Σύγχρονες Μηχανές) και Συστήματα Ηλεκτροκίνησης.

Είναι συγγραφέας του βιβλίου «Ηλεκτρικές Μηχανές-Σύγχρονες Μηχανές» των εκδόσεων Τζιολα.

Έχει επιβλέψει την εκπόνηση περισσότερων από 80 διπλωματικών εργασιών. Τα αποτελέσματα 13 από αυτές έχουν δημοσιευθεί σε διεθνή επιστημονικά περιοδικά και συνέδρια.

Ερευνητικά ενδιαφέροντα:

- Ποιότητα ηλεκτρικής ισχύος (αρμονική παραμόρφωση ρευμάτων και τάσεων, ασυμμετρίες φορτίων και τάσεων, δυνατότητα φόρτισης αγωγών)
- Ενεργά και παθητικά φίλτρα αρμονικών
- Διασύνδεση ανανεώσιμων πηγών ενέργειας στα ηλεκτρικά δίκτυα
- Έλεγχος της διασύνδεσης ΑΠΕ μέσω μετατροπέων ηλεκτρονικών ισχύος
- Μεταβατικά φαινόμενα που προκαλούνται από την λειτουργία ΑΠΕ στο δίκτυο.
- Σχεδίαση και ανάπτυξη grid-forming converters για ΑΠΕ
- Παροχή επικουρικών υπηρεσιών από ΑΠΕ

Υπό την επίβλεψή του έχουν ολοκληρωθεί επιτυχώς πέντε διδακτορικές διατριβές. Επίσης συμμετείχε και συμμετέχει σε τριμελείς συμβουλευτικές και επταμελείς επιτροπές διδακτορικών διατριβών.

Ήταν συντονιστής (coordinator) του πολύ επιτυχημένου ερευνητικού προγράμματος (RIA) *Enable Ancillary Services by Renewable Energy Sources* (EASY-RES, 2018-2021, www.easyres-project.eu) το οποίο χρηματοδοτήθηκε με 4,6M€ από την Ευρωπαϊκή Ένωση.

Είναι επίσης συντονιστής (coordinator) του έργου επίδειξης καινοτομίας (IA) *Cooperative Cyber protection for modern power grids* (COCOON, 2023-2026) το οποίο χρηματοδοτήθηκε από την Ευρωπαϊκή Ένωση με 5,2M€.

Έχει συμμετάσχει σε περισσότερα από 25 μικρότερα ερευνητικά προγράμματα ενώ σε 20 από αυτά ήταν συντονιστής.

Επίσης έχει λειτουργήσει ως αξιολογητής σε περισσότερες από τριάντα ερευνητικές προτάσεις που υποβλήθηκαν στην Ευρωπαϊκή Ένωση (ΕΕ) και ως κριτής σε έξι ερευνητικά προγράμματα που χρηματοδοτήθηκαν από την ΕΕ.

Είναι επίσης κριτής σε πλήθος διεθνών επιστημονικών περιοδικών στην περιοχή των ερευνητικών του ενδιαφερόντων.

Συμβάλει στο διοικητικό έργο του πανεπιστημίου μέσω της συμμετοχής σε πολλές επιτροπές του ΤΗΜΜΥ, της Κοσμητείας της Πολυτεχνικής Σχολής αλλά και του ΑΠΘ συνολικά.

Στοιχεία επικοινωνίας:

Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης

Πολυτεχνική Σχολή

Τμήμα Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών

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Δημοσιεύσεις (ενημέρωση Σεπτέμβριος 2022)

Διδακτορική διατριβή

Τίτλος: *Λειτουργία Ανεμογεννητριών σε μικρά αυτόνομα δίκτυα*

Υποβλήθηκε στο Τμήμα Ηλεκτρολόγων-Μηχανικών της Πολυτεχνικής Σχολής Α.Π.Θ, Μάρτιος 1991, Επιβλέπων Καθ. Π. Ντοκόπουλος

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Άλλες Δημοσιεύσεις

Οι παρακάτω δημοσιεύσεις αποσκοπούν στην διάδοση και επικοινωνία (Dissemination and Communication) ερευνητικών αποτελεσμάτων ή καλών πρακτικών στο ευρύτερο κοινό.

DC.8 Παρουσίαση, μέσω συνέντευξης, των απόψεών μου για το πώς πρέπει να είναι οι μετατροπείς ηλεκτρονικών ισχύος των ΑΠΕ στο μέλλον για να συμβάλλουν στην ευστάθεια των μελλοντικών δικτύων ηλεκτρικής ενέργειας (και της προσέγγισης του project EASY-RES), και στην δυνατότητα λειτουργίας τους με 100% ΑΠΕ. Η συνέντευξη δόθηκε στο γερμανικό περιοδικό ευρείας κυκλοφορίας PV Magazine.
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DC.1 Συγγραφή, κατά το διάστημα 1996-2013, δεκατριών ενημερωτικών άρθρων στο περιοδικό «ΚΤΙΡΙΟ» με αντικείμενα, τον φωτισμό, τους ηλεκτρικούς υποσταθμούς, τα συστήματα δομημένης καλωδίωσης στα κτίρια, την συμπαραγωγή θερμότητας-ηλεκτρισμού, τα συστήματα BMS, την ψύξη με απορρόφηση, τον έλεγχο συστημάτων κλιματισμού, τις φωτοβολταϊκές εγκαταστάσεις, κλπ.