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| Title | [**Similarity requirements for mixed convective boundary layer flow over vertical curvilinear porous surfaces with heat generation/absorption**](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=UhkxgEQAAAAJ&sortby=pubdate&citation_for_view=UhkxgEQAAAAJ:dQ2og3OwTAUC) | | |
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| Published Journal Name | International Journal of Aerospace Engineering | | |
| Type of Publication | Full Article paper | | |
| Volume | 2020 | Issue | 1 |
| Publisher | John Wiley & Sons Ltd | | |
| Publication Date | March 03, 2020 | | |
| ISSN | Online ISSN:1687-5974, Print ISSN:1687-5966 | | |
| DOI | [**https://doi.org/10.1155/2020/7486971**](https://doi.org/10.1155/2020/7486971) | | |
| URL | [Similarity Requirements for Mixed Convective Boundary Layer Flow over Vertical Curvilinear Porous Surfaces with Heat Generation/Absorption - Maleque - 2020 - International Journal of Aerospace Engineering - Wiley Online Library](https://onlinelibrary.wiley.com/doi/full/10.1155/2020/7486971) | | |
| Other Related Info. |  | | |
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| Abstract |  |
| Similarity requirements for three dimensional combined forced and free convective laminar boundary layer flows over the porous inclined vertical curvilinear surfaces with buoyancy effects and heat absorption/generation effects are investigated theoretically. The potential flow in the mainstream and Gabriel lame coefficients outside of the boundary layer are the function of (*ξ*, *η*). Hence, the external velocity components (*Ue*, *Ve*) and Gabriel lame coefficients (*h*1, *h*2, *h*3) are independent of *ζ*. Here, *h*3(*ξ*, *η*) = 1 has been set such that *ζ* represents actual distance measured normal to the surface. Similarity requirements for an incompressible fluid are sought on the basis of detailed analyses in order to reduce the governing partial differential equations into a set of ordinary differential equations. Finally, different possible cases are exhibited in a tabular form with the inclusion of *ΔT* variations for onward flow study that are helpful to the future researchers for the flow over the orthogonal curvilinear surfaces. | |