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Integrated semigroups and integrodifferential equations. (English) Zbl 0788.45011
Semigroup Forum 48, No. 1, 79-95 (1994).

The authors prove some existence, uniqueness and continuous dependence results for two classes of integro-differential equations in a Banach space by using the theory of nondegenerate, locally Lipschitz continuous integrated semigroups. Furthermore, they apply the abstract results to the study of some specific problems in one-dimensional viscoelasticity.

Reviewer: [I.Vrabie \(Iași\)](#)

MSC:

[45N05](#) Abstract integral equations, integral equations in abstract spaces
[45J05](#) Integro-ordinary differential equations
[74Hxx](#) Dynamical problems in solid mechanics
[47D06](#) One-parameter semigroups and linear evolution equations

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Keywords:

[existence](#); [uniqueness](#); [continuous dependence](#); [integro-differential equations](#); [Banach space](#); [nondegenerate locally Lipschitz continuous integrated semigroups](#); [viscoelasticity](#)

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