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Correction: 'Abstract elliptic operators appearing in atmospheric dispersion' by Veli B Shakhmurov and Aida Sahmurova published in the journal of Boundary Value Problems, 2014, V. 2014: 43

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Correction

Errata of paper [1]. In Theorems 3.2 and 3.3 it should say $m = 0$, *i.e.*, these theorems should read as follows.

Theorem 3.2 *Let Condition* 3.2 *hold. Then problem* (3.5)-(3.6) *has a unique solution* $u \in W^{2,p}(0,1;E(A),E)$ *for* $f_k \in E_k$, $\lambda \in S_\psi$, *with sufficiently large* $|\lambda|$ *and the following coercive uniform estimate holds*:

$$\sum_{i=0}^{2} |\lambda|^{1-\frac{i}{2}} \left\| u^{(i)} \right\|_{L^p(0,1;E)} + \|Au\|_{L^p(0,1;E)} \le M \sum_{k=1}^{2} \left(\|f_k\|_{E_k} + |\lambda|^{1-\theta_k} \|f_k\|_E \right). \tag{3.7}$$

Theorem 3.3 *Assume Condition* 3.2 *holds. Then the operator* $u \to \{(L+\lambda)u, L_1 u, L_2 u\}$ *for* $\lambda \in S_{\psi,\varkappa}$ *and for sufficiently large* $\varkappa > 0$ *is an isomorphism from*

$$W^{2,p}\left(0,1;E(A),E\right) \text{ onto } L^p(0,1;E) \times E_1 \times E_2.$$

Moreover, the following uniform coercive estimate holds:

$$\sum_{i=0}^{2} |\lambda|^{1-\frac{i}{2}} \left\| u^{(i)} \right\|_{L^p(0,1;E)} + \|Au\|_{L^p(0,1;E)} \le C \left[\|f\|_{L^p(0,1;E)} + \sum_{k=1}^{2} \left(\|f_k\|_{E_k} + |\lambda|^{1-\theta_k} \|f_k\|_E \right) \right]. \tag{3.12}$$

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